BUTANE-PROPANE

JUNE 1959

"Now is the time" to sell househeating— A special section...37

A CHILTON (PUBLICATION

HEADQUARTERS FOR L.P. GAS INFORMATION SINCE 1931



DISTRICT OFFICES:

Williamsburg, Virginia Moorhead, Minnesota Salt Lake City, Utah Billings, Montana Des Moines, Iowa Russell, Kansas Houston, Texas Midland, Texas El Dorado, Arkansas

TULOMA GAS PRODUCTS COMPANY





Pan American Building . Phone CHerry 2-3261 . Tulsa, Oklahoma

More miles of service per dollar invested with Hackney T-1 transports

The way we make T-1 transports is sure to appeal to you on the basis of long-term, profitable investments. Here's why we think so.

When T-1 steel became approved for transports, our engineers and metallurgists already knew how to fabricate it to preserve fully its inherent qualities of lightness and strength.

This basic experience led to new and thoroughly tested standards of manufacture which resulted in production of T-1 transports which assure you more miles of service per dollar invested...lower maintenance and repair costs ...more pay load per transport—a truly thrifty investment for owners of Hackney T-1 transports.

For complete details of the superiority of Hackney T-1 transports in construction, operation and maintenance, write to the address below.

Why Hackney T-1 transports pay off

- Superior welding techniques provide safer, stronger welds
- Special X-ray and Magnaflux inspection methods assure flawless, smooth fusions
- Improved stress-relieving methods preserve inherent strength of T-1 steel
- Strict inspection methods eliminate chances of future failures
- Compliance with all safety regulations and codes—ASME, ICC, state authorities
- Constructed to meet local legal load limits
- Wide choice of optional equipment to make deliveries faster, easier, safer





Reliability

- ...longer life—No tubes in the receiver, no vibrators in the power supply...all replaced by pre-aged, double-checked transistors. Power transistors have a 67 to 150% power safety factor.
- ...cooler operation-Up to 40° (F) less than other sets.
- ...lower power consumption—80% less current drain on "standby"
 —10 to 15% less during "transmit."

... greater audio output-5 watts (2½ to 3 times that of conventional radios).

"MOTRAC" radio is the most far-reaching advance in 2-way radio since the introduction of FM. The result of a six year, three million dollar development program. Available now. Call or write today.



MOTRAC is a trademark of Motorola Inc.

MOTOROLA"MOTRAC"2-WAY RADIO
MOTOROLA COMMUNICATIONS and ELECTRONICS, INC.
4501 AUGUSTA BOULEVARD • CHICAGO 51, ILL.

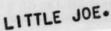




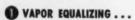
FISHERGRAM FROM LITTLE JOE

FISHER L300 COMBOVALVE HAS HIGHEST FILLING CAPACITY AND GREATEST CONVENIENCE OF CONNECTION OF ANY COMBINATION VALVE IN

THE LP GAS INDUSTRY=







Capacity is equivalent to an individual vapor equalizing valve handling 4400 CFH at 100 psi.

WAPOR SERVICE VALVE . . .

Allows direct connection of regulator without use of a pigtail or elaborate bracket.

@ FILLER VALVE . . .

Has highest filling capacity-60 GPM propane at 10 psi pressure drop, Horizontal filling simplifies hook-up and increases hose life.



May be wrenched from all four sides without strain on valve components-NO special wrench required.

5 Liquid directional tube included with assembly.



IF IT FLOWS THROUGH PIPE ANYWHERE IN THE WORLD... CHANCES ARE IT'S CONTROLLED BY...

FISHER GOVERNOR COMPANY Marshalltown, lowa

SINCE 1880

CONTENTS • JUNE 1959

Volume 21 - Number 6



Features Digest Tomorrow's tomatoes today—with an assist from LPG Hydroponics, the science of growing "premium" foods under laboratory conditions, can mean a great deal to the LPG dealer. The hydroponic farmer can make a living by cultivating an outdoor area small enough to be efficiently heated by indoor methods, and in a location ideally suited to the use of L. P. gas. A dual-fuel load! Why not? asks Red-E-Gas of St. Louis The city's population is rapidly moving into rural areas where natural gas will not reach. Red-E-Gas feels if it keeps these potential customers "gas educated," there's a good chance they'll be LPG customers once again. Swing joints, through-flow valves features of new Delaware plant. When this plant was designed the main thought was to reduce everything to as simple a layout as possible, yet obtain a high flow rate of gas. Power Section Irrigation builds big load for carburetion specialist. Among the many San Joaquin Valley (Calif.) farmers and ranchers using irrigation, sprinkling has enjoyed a tremendous pepularity increase and LPG is the forward fuel. Specialising in irrigation and other carburetion loads, Balersfield LPG dealer Bill Herndon, has built a substantial business in just 18 months. Departments Advertisers' Index			_					
Planning your campaign	The Annual	The annual BPN househeating sell-o-rama						
Peatures Digest Carrying out the plan—advertising and promotion 46	BPN House-	"Now is the time" to sell househeating						
Planning your campaign	heating							
Carrying out the plan—advertising and promotion	-							
How to demonstrate effectively	Jen-O-Rama							
Features Digest Tomorrow's tomatoes today—with an assist from LPG Lydroponics, the science of growing "premium" foods under laboratory conditions, can mean a great deal to the LPG dealer. The hydroponic farmer can make a living by cultivating an outdoor area unall enough to be efficiently heated by indoor methods, and in a location ideally suited to the use of L. P. gas. Edward G. Dickson A dual-fuel load! Why not? asks Red-E-G-so St. Louis The city's population is rapidly moving into rural area where natural gas will not reach. Red-E-Gas feels if it leeps these potential customers "gas educated," there's a good chance they!! be LPG customers once again. Swing joints, through-flow valves features of new Delaware plant. When this plant was designed the main thought was to reduce everything to as simple a layout as possible, yet obtain a high flow rate of gas. Power Section Irrigation builds big load for carburetion specialist. Among the many San Joaquin Valley (Calif.) farmers and ranchers using irrigation, and other carburetion loads, Bakersfiel LPG dealer Bill Handon, has built a substantial business in just 18 months. Departments Advertisers' Index Associations 78 Letters Behind the Scenes 7 News 60 Calendar 82 The Trade Clessified 100 Washington Report 100 101 102 103 103 104 105 105 106 107 107 108 109 109 109 109 109 109 109								
Features Digest Tomorrow's tomatoes today—with an assist from LPG								
Features Digest Tomorrow's tomatoes today—with an assist from LPG Hydroponics, the science of growing "premium" foods under laboratory conditions, can mean a great deal to the LPG dealer. The hydroponic farmer can make a living by cultivating an outdoor area small enough to be efficiently heated by indoor methods, and in a location ideally suited to the use of L. P. gas. A dual-fuel load! Why not? asks Red-E-Gas of St. Louis The city's population is rapidly moving into rural areas where natural gas will not reach. Red-E-Gas feels if it keeps these potential customers "gas educated," there's a good chance they'll be LPG customers once again. Swing joints, through-flow valves features of new Delaware plant. When this plant was designed the main thought was to reduce everything to as simple a layout as possible, yet obtain a high flow rate of gas. Power Section Irrigation builds big load for carburetion specialist. Among the many San Joaquin Valley (Calif.) farmers and ranchers using irrigation, sprinkling has enjoyed a tremendous pepularity increase and LPG is the fovoral fuel. Specialising in irrigation and other carburetion loads, Balersfield LPG dealer Bill Herndon, has built a substantial business in just 18 months. Departments Advertisers' Index								
Hydroponics, the science of growing "premium" foods under laboratory conditions, can mean a great deal to the LPG dealer. The Hydroponic farmer can make a living by cultivating an outdoor area small enough to be efficiently heated by indoor methods, and in a location ideally suited to the use of L. P. gas. Edward G. Dickson A dual-fuel load! Why not? asks Red-E-Gas of St. Louis		Call on your manufacturers and associations for help	60					
The city's population is rapidly moving into rural areas where natural gas will not reach. Red-E-Gas feels if it keeps these potential customers "gas educated," there's a good chance they'll be LPG customers once again. Swing joints, through-flow valves features of new Delaware plant When this plant was designed the main thought was to reduce everything to as simple a layout as possible, yet obtain a high flow rate of gas. Power Section Irrigation builds big load for carburetion specialist	Features Digest	Hydroponics, the science of growing "premium" foods under laboratory conditions, can mean a great deal to the LPG dealer. The hydroponic farmer can make a living by cultivating an outdoor area small enough to be efficiently heated by indoor methods,						
The city's population is rapidly moving into rural areas where natural gas will not reach. Red-E-Gas feels if it keeps these potential customers "gas educated," there's a good chance they'll be LPG customers once again. Swing joints, through-flow valves features of new Delaware plant When this plant was designed the main thought was to reduce everything to as simple a layout as possible, yet obtain a high flow rate of gas. Power Section Irrigation builds big load for carburetion specialist								
Power Section Irrigation builds big load for carburetion specialist		A dual-fuel load! Why not? asks Red-E-Gas of St. Louis						
When this plant was designed the main thought was to reduce everything to as simple a layout as possible, yet obtain a high flow rate of gas. Power Section Irrigation builds big load for carburetion specialist		reach. Red-E-Gas feels if it keeps these potential customers "gas educated," there's						
Among the many San Joaquin Valley (Calif.) farmers and ranchers using irrigation, sprinkling has enjoyed a tremendous popularity increase and LPG is the favored fuel. Specializing in irrigation and other carburetion loads, Bakersfield LPG dealer Bill Herndon, has built a substantial business in just 18 months. Departments Advertisers' Index 102 Highlights 2 Associations 78 Letters 1 Behind the Scenes 7 News 6 Beyond the Mains 9 Power 9 Calendar 82 The Trade 9 Classified 100 Washington Report 16		When this plant was designed the main thought was to reduce everything to as simple						
Herndon, has built a substantial business in just 18 months. Advertisers' Index 102 Highlights 2 Associations 78 Letters 1 Behind the Scenes 7 News 66 Beyond the Mains 9 Power 99 Calendar 82 The Trade 99 Classified 100 Washington Report 166	Power Section	Among the many San Joaquin Valley (Calif.) farmers and ranchers using irrigation, sprinkling has enjoyed a tremendous popularity increase and LPG is the favored fuel.	95					
Associations 78 Letters 1 Behind the Scenes 7 News 66 Beyond the Mains 9 Pawer 99 Calendar 82 The Trade 99 Classified 100 Washington Report 16								
Associations	Departments							
Beyond the Mains								
Calendar 82 The Trade 94 Classified 100 Washington Report 10			-					
Classified 100 Washington Report 10								
		What's New in Products and Trade Literature	84					

2 Elen BUTANE GAS CO.

BULK STORAGE

Providing maximum LPG storage for your customer's security is one of the best ways possible for you to gain and hold customers. The cost is practically nothing! The steel propane storage tank on your lot is worth just as much today as it was ten years ago ... and it will retain its value.

Haul More Gas...Less Steel Than Ever Before!

All Nor-Tex Delivery Equipment embodies the newest development in sleek, LIGHTWEIGHT, streamlined twin or single barrel LPG Delivery Units featuring original Nor-Tex ALUMINUM SKIRTING and CABINETS. Exclusive Nor-Tex engineering designs have produced ideal balance and drastically reduced over-all gross weight. Side or rear cabinets on these new lightweight units are optional and are arranged to fit your individual requirements.

WE ARE TRUCK DISTRIBUTORS

As authorized new truck distributors Nor-Tex can save you hundreds of dollars on Internationals... Chevrolets... Fords... GMC's and Dodges. Order any unit you need. You can't beat a Nor-Tex deal for all-around value.

- Haul Extra Gallons Each Trip
- Deliver Extra Gallons Each Trip
- Work Fewer Hours
- leduce Overtime Costs
- Drive Less Miles
- Earn More Money
- ... The Nor-Tex Way!

OR PHONE FOR PRICES

PRODUCTS COMPANY

National Sales Agents for

RTH

OF THE RICH LP GAS MARKET CAN BE YOURS

...With Low Cost Work Quality Equipment

TRANSPORTS

You can now hauf MORE GAS and LESS STEEL than over before with skillfully engineered, smart looking, streamlined Nor-Tex trans-ports of T-1 and A-202 steel. These easy-to-maneuver, road-tested nits are having more gas and substantially boosting profits for ors everywhere. Nor-Tax transports are also completely safe and pendable . . . built by men with years of builk plant experience.

Whatever your needs in LPG equipment there is a safe, profitable, factory tailored Nor-Tex unit ready for you. We are truck distributors and we manufacture LPG Truck and Transport Tanks, all types of LPG Tractor and Motor Fuel Tanks, Portable LPG Filling Stations, Trailer Tanks, LPG Storage and Domestic Tanks, Farm Carts and Anhydrous Ammonia Tanks, all built by men with years of Butane-Propane bulk plant experience. Let Nor-Tex help you boost profit and slash delivery costs with High Flow piping . . . faster loading and unloading units.





4 BIGGER PAYLOAD DELIVERY UNITS

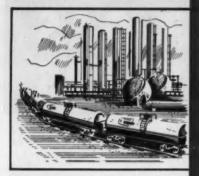
- STANDARD TWIN
- PAYLOAD SPECIAL
- CUSTOM TWIN
- DELUXE TWIN

2500 WG Units Weigh Under 23,000 lbs. Loaded

Every bulk plant operator is interested in these four new, sleek, LIGHT-WEIGHT, streamlined, twin or single barrel Nor-Tex LPG Delivery Units with their high flow plumbing. Even 3000 WG units and over are within the 18,000-lb. axle limit.

For day in, day out efficiency, durability, payload, fast loading, high rated delivery, perfect balance and appearance Nor-Tex delivery equipment can't be beat. Nor-Tex engineering has greatly reduced over-all weight.

ASTANK CO. P. O. BOX 1219
DENTON, TEXAS
DUpont 2-5416





When You RECEIVE Good Service . . .

You can GIVE Good Service

The closest cooperation between producer and marketer is important if the consumer is to receive the right kind of service. And Sinclair has a determined desire to give you the cooperation you need to serve your customers better.

You'll receive the kind of dependable service you want when you have a Sinclair TRUFLAME contract. Write or call for information today.

An EXTRA Sinclair service is the TRUFLAME 50/50 Advertising Program, available to all Sinclair TRUFLAME distributors. Get twice the advertising at half the cost with this practical sales plan.





LIQUEFIED PETROLEUM GAS SALES DEPARTMENT SINCLAIR OIL BUILDING - TULSA 2, OKLAHOMA

TELEPHONE LUther 4-0411



Keep Up with L. P. gas **Developments Each Month**

by subscribing to

198 SOUTH ALVARADO STREET, LOS ANGELES 57, CALIFORNIA

☐ Check	herewith	□ Bill	me	0 1	year	\$2.00	0	2 year	\$3.00
Name	*********					Title		*****	
Firm									
Street									
City									



A CHILTON PUBLICATION

EDITORIAL

WILLIAM W. CLARK: EDITOR

Robert Clay: Managing Editor Lynn C. Denny: Associate Editor William T. Harper: Eastern Editor Mary Low Harrington: Assistant Editor Lester L. Luxon: Technical Editor Raymond A. Grote: Art Editor Neil R. Regelmbal: Washington Editor Gerald N. Smith: Research Robert Gunning: Readability Consultant

BUSINESS

FRANK M. CHAPMAN: PUBLISHER

Gilbert Bowman: Promotion Manager Roberta Congway: Production Manager M. A. Kesterson: Circulation Manager

ADVERTISING OFFICES

New York (17), 100 E. 42nd St. Richard Duffy, OXford 7-3400

Chicago (1) 360 N. Michigan Ave., Suite 418 Richard L. DeMuesy, RAndolph 6-2166

Cleveland (15) 930 B. F. Keith Bldg. Howard Baird, SUperior 1-2860

Dallas (6) 189 Meadows Bldg. William J. Smyth, EMerson 8-4751

San Francisco, 1355 Market St. Frank McKenzie, UNderhill 1-9737

Los Angeles (57) 198 So. Alvarado St. Larry Jackson, DUnkirk 7-4337

BUTANE-PROPANE News is publimonthly. Copyright 1959 by Chilton Copany, Chestnut and 55th Sts., Philodel 39, Pa. Subscription price: United St U. S. possessions and Canada: 50c per cone year, \$2; two years, \$3. Mexico, \$3 and Central America, Caribbean one year, \$3: two years, \$3. All accountries, \$10 per year. Second Class page paid at Phila., Pa. Member of Lifed Petroleum Gas Association, Nati-Fire Protection Association. Available microfilm.

G. C. BUZBY, President

Vice Presidents: P. M. Fohrendorf, V. Rowlands, George T. Hook, Ro McKenna. Treasurer, William H. Directors: Maurice E. Cox, Frank P Everif B. Terhune, Jr., Russell W. C John C. Hildreth, Jr., Charles A. S. John H. Kofron.

Stanley Appleby, Comptroller

Editorial and advertising offices: 198 So. Alvarado St., Los Angeles 57 Phone DUnkirk 7-4337







behind the scenes BPN

What's your problem?

It's not too often that someone offers something for nothing, so when W. L. Thomas of Southern Technical Institute did just that, we thought we'd better rush it into print. You might be able to take him up on it.

How would you like to have Mr. Thomas' bright young men solve a technical problem for you? They have the facilities, are acquiring the knowhow, and will be working under the expert direction of Thomas, who is head of the gas fuel department at the Chamblee, Ga. school.

They're looking for projects to work on. If your problem is the problem of a good cross-section of the dealers throughout the U. S., and if it's of such a nature as to be adaptable to laboratory study, Southern Tech would like to know about it.

Recently, Mr. Thomas submitted an excellent article based upon research done by his advanced students. It's an article we will be proud to publish in an early issue. In his covering letter, he said:

"We intend to take several projects of this nature each year. We believe it will benefit the industry as well as publicizing our school. Of course, to be of value the project must be something that is a problem to most dealers.

"Any suggestions you have along this line would be appreciated."

We are now working on some suggestions. But, meantime, you might have some ideas of your own. If they meet the school's requirements, no doubt Southern Tech would be happy to give them serious consideration.

Send them along to us, if you'd like (BPN, 198 South Alvarado, Los Angeles 57, Calif.) and we'll be glad to forward them.



Master of Every Nut and Bolt...

NE RIBOID. Hex Wrench

Wide-open fast-action multi-sided grip
on every hex, square and flathead!



"Got the RIDID name on it?...
Okay, I'll take it!"

Quick adjustment—stays to size...
this new Hex Wrench goes on easily,
won't slip off—harder you pull, the
tighter it grips... no more skinned
knuckles or rounded nut shoulders!
Narrow jaw for close quarters.
Famous PHENID heavy-duty design,
guaranteed housing, comfort-grip
handle. Three sizes for ¾" to 2"
nuts. Make your work easier and
faster—buy new PHENID Hex
Wrenches at your Supply House!

Elyria, Ohio, U.S.A.

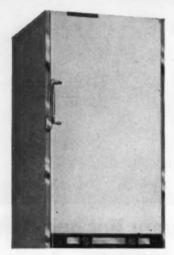
The Ridge Tool Company

THREADED PIPE...It's Tight...It's Best...Costs Loss!

TINY YET



TERRIFIC!



4 cu. ft. – 32%" H – 21¾" W – 25½" D 6 cu. ft. – 43¾" H – 23%" W – 27½" D

the new NORCOLD

gas refrigerator

The smartest refrigerator ever designed for the small kitchen, den, bar, doctor's office or location where a built-in installation is desirable. Tiny, yet it has a maximum of storage space. The high capacity NORCOLD refrigerator system is fully backed by a 10 year warranty. Thousands have been thoroughly field tested with proven efficiency. There's a waiting market today for these slim, trim NORCOLD units... don't wait to investigate!





SILENT — never a hum or vibration

NO MOVING PARTS — nothing to wear out

NORCOZIP IGNITER — front lighting with push button simplicity

NORCOZIP IGNITER — front lighting with push button simplicity

ADJUSTABLE TEMPERATURE CONTROL — guards your food

100% SAFETY SHUT OFF CONTROL — automatic protection

RIGHT OR LEFT HINGED DOOR — permits simple reversing

FEATURES — cross top freezing-egg rack-adjustable shelves

10 YEAR WARRANTY — on the entire refrigeration unit

PARTS AND SERVICE — nationwide



Write today for FREE descriptive full color-brochure

NORCO

Dept. 16 - 5111 W. Washington Blvd., Les Angeles 16, California

Beyond the Mains

With WILLIAM W. CLARK . Editor

It's Your Accomplishment

CONGRATULATIONS! You have the electric utilities genuinely worried.

Somehow, things aren't moving along quite as well as they think they should. This is supposed to be the era of Electric Living, but still there seem to be an awful lot of consumers who aren't tuned in.

We have the word of the electricians themselves to prove this. Recently, they met in New Orleans, for the convention of the Edison Electric Institute, to shed some tears over the "lost ground" in their competitive battle with the gaseous fuels.

Despite all the heavy "Live Electrically" propaganda of recent years, electric water heaters are progressing backwards, clothes dryers are trending toward gas, and electric ranges lost some of their steam.

Let's look at the record. In 1948, electric water heaters had crept up on gas to a point where one was sold for every $1\frac{1}{2}$ gas models. Since then they've taken their lumps, and today the ratio is 3.3 to 1 in favor of gas. In 1948, electric clothes dryers had us whipped by a score of 5 to 1. Since then, the margin has been hacked away at until now it's down to 2 to 1.

The record on electric ranges would appear to be pretty good to a disinterested observer. Ten years ago we were still ahead of them 2 to 1. Today the ratio is 1.4 to 1. But this, say the electrical salesmen, is too slow. Apparently they feel that by now they should have us on the run.

The record isn't too impressive, from their standpoint. For the past decade they've poured millions of dollars in advertising and promotion. They've harped so consistently on the "modernity" theme that you'd think anyone who wasn't wired for 220 must still be driving a

horse and buggy. Yet, a lot of consumers obviously haven't been convinced. Despite the heavy barrage, they continued to recognize gas as the most efficient, economical, fast, and flexible fuel there is.

Somebody had to do the job of keeping them sold. Was it the AGA with its PAR program, or the LP-Gas Council, with its industry-wide advertising efforts?

In a good measure, yes. These are coordinated programs, something the electric merchants lacked for a good many years, and they've been duly envious. They say that these activities are more than a little responsible for the excellent showing gas has made in the teeth of their multimillion-dollar blasts. The programs are the result of teamwork at the national level, and until recently the electric utilities and manufacturers have been unable to get together on this scale.

Today, with their National Electric Living Program, they are moving in this direction, but slowly. The "first phase" of this job has been completed, but EEI officials admit it still has a long way to go. To date there hasn't been enough coordination of the calibre that's helping make the gas program click.

But the real weak link is at the local level. Says E. O. George, chairman of the Institute's sales division, "EEI has supplied leadership... but sales don't just happen. You have to go out and sell positively and aggressively."

That's just another way of re-stating the well-known truth that "all sales are local." Nothing moves until you, at the local level, give it a push. If gas is successfully turning back the onslaughts of electricity, it's you who are doing it.

So that's why we say . . . and repeat . . . "Congratulations!"



Build that summer load with sales for . . .

FARM TRACTORS
CROP DRYING
TOBACCO CURING
STATIONARY ENGINES

Let us help you develop this business . . . Contact our nearest sales office or field representative.







WARREN PETROLEUM CORPORATION

TUISA, OKLAHOM

COLUMBIA, S. C. . FT. WORTH, TEXAS . MIDLAND TEXAS. NEW YORK, N. Y. . HOUSTON, TEXAS . OMAHAY NEBR.

/ORK, N. Y. HOUSTON, TEXAS CMAHA/ NEBR. ON, MISS. ST. LOUIS, MO. LOUISVILLE, KY. TAMPA, FLA. LOS ANGELES, CALIF. FIELD REPRESENTATIVES

BRYN MAWR, PA. • ARLAN A. DA. • NEW HAVEN, DONN MONTGOMERY, ALA. • ARCKSON, MICH. • FOND DU LAC, WIS NASHVILLE, TENN. • BPICER, MINN. • BARDEN CITY, KANS



Proper furnace venting prevents moisture in room

New Mexico

One of our customers has a twoyear-old home with two floor furnaces: one in a bedroom hall and one in the living room, which has two plate glass windows. In winter, the walls and windows sweat so badly the water runs down on the floor and has both rotted window frames and floor.

What causes this? The furnaces are vented with transite. We didn't do the work, so I don't know if it was done correctly.

His neighbor has a new house with floor furnaces and plate glass windows but has no trouble.

E. B. C.

Vented floor furnaces, carrying AGA approval correctly installed and vented and otherwise in good condition should not cause the trouble which you have described. This is substantiated by the performance in the neighbor's house.

There are many other things in a house which may cause the "sweating" condition. However, the floor furnaces should be carefully checked first.

1. Go over the combustion chamber carefully to see that there are no cracks through which the products of combustion can escape directly into the room. Check joints to see that they are tight and have not opened due to warpage or that the gasket material, if any, has not deteriorated and fallen out.

2. Some floor furnaces have a small capped opening in the top of the combustion chamber through which the pilot light may be observed and lighted. This usually has a gasket and latches on it much like the cap on an automobile gasoline tank or radiator. See that this opening is properly closed and sealed.

3. Every AGA approved furnace is tested with a draft hood, which is built into the furnace or is shipped separately as a part of the furnace. It should always be installed in accordance with the appliance manufacturer's instructions. For further information on draft hoods and their purposes see pages 200, 201 and 202 of the HANDBOOK BUTANE-PRO-PANE GASES. Installation of a furnace without a draft hood and with the flue pipe connected directly to the furnace outlet may prevent normal discharge of the combustion products from the combustion chamber and cause them to spill out so they will enter the room through cracks around the furnace or elsewhere. Excessive draft will cause improper operation of the appliance.

4. Check the vent size to be sure it meets the manufacturers recommendations. Individual vents for each furnace are the ideal, but one vent for the two furnaces can be satisfactory if properly sized. The area must be equal to or larger than the combined areas of the individual furnace vents. There are many satisfactory transite vented installations throughout the country.

The horizontal portions of vents should be kept as short as possible and be sloped upward (1-in. to 1-ft min.) to the vertical section. The horizontal or lateral run should never exceed 75 per cent of the vertical flues length, and be as free as possible from elbows or other turns.

5. The vertical vent should extend at least 2 ft above nearby walls, gables or other portions of the building and be capped with an approved downdraft diverter.

The William Wallace Co., Belmont, Calif., publishes booklets, "Venting of Gas Appliances" and "Vent Installation Handbook." They will be glad to send you both.

It is possible that the furnaces and vents may be in good order. The newer houses and remodeled houses may be much tighter around doors and windows. This will prevent infiltration of air and adequate ventilation unless some method is provided through windows or vents. The living habits of the two families may be quite different. Moisture released from cooking, bathing, washing dishes, clothes, etc., plants, humans and pets may, if adequate ventilation is not provided, build up in the room.

Naturally the sweating will occur when the furnaces are in use because the house is closed, the air in the room is warm and can carry a larger load of moisture. The walls and windows are cold and when the overly moist air contacts them it condenses. Adequate ventilation to permit the moist damp air to leave the house and be replaced with the drier air is the only answer if this proves to be the cause.-Ed.



How to estimate cylinder depreciation

Australia

What is the prospective life of 4BA 100 lb and 20 lb cylinders and regulators and the rate of depreciation usually charged in the U.S.A.? J. N. H.

Although the life of most 100 and 20 lb cylinders will exceed 20 years, the tax people in this country accept a full depreciation in 10 years .- Ed.



Special heaters for special jobs

Nebraska

I need information on an LPGfired heater to keep beer from freezing in a semi-trailer.

I also want facts on a heater for heating water in the water storage tank on a ready-mix concrete truck.

N. W. J.

There are at least three companies which manufacture cargo heaters and should have a model that will meet your needs. They are: The Bica Co. 1170 North State St., Girard, Ohio; Hunter Manfacturing Co., 1550 East 17th St., Cleveland, Ohio; Cargo-Guard Co., P. O. Box 1977, Portland, Maine.

We do not know of a heater especially designed to heat water in the water storage tank of a cement mixing truck. It might be possible to adopt a stock tank heater to this service. The following companies manufacture such heaters and may have some experience in applying their heaters to this service, or can help you solve your problem. Johnson Gas Appliance Co., 625 E Ave. N. W., Cedar Rapids, Iowa; Fairfield Engineering Co. 901 West Broadway, Fairfield, Iowa; Black Sivalls & Bryson Inc., 7500 East 12th St., Kansas City, Mo.; The Broyhill Co., Dakota City, Neb.-Ed.



Converting to LPG

Alabama

Our operation has a manufacturing concern interested in using L. P. gas for firing a 125 hp. boiler running 10 to 12 hours a day. The customer wants us to give him figures as to the cost of operation of the boiler using our gas. He is presently using natural gas and we presume his burners could be converted for L. P. gas.

Please use a fuel price of 12 cents and give us an estimate of the cost per month. Also advise if we would have to have any special equipment in addition to a tank and regulator.

F. O. B.

We cannot give a fuel cost per month as you have requested because we don't know how much natural gas it is using per month. You state it is working 10 to 12 hours per day, but how hard is it working? Is it working at its rated capacity of 125 hp. per hour or at 50 per cent of this rating or at 150 per cent or some other rate? (Boilers of this type have been pushed to well over 200 per cent of their rating.)

Let us assume the heating value of the natural gas is 1000 Btu per cu ft. It may be 1050 or 1100 or it may be under 1000 depending on the source. Natural gas is usually sold on the basis of 1000 cu ft. Assume the natural gas costs your customer 75 cents per thousand cu ft. It may cost more or less

If you are going to supply propane at 92,000 Btu per gal. it will require

very near 11 gal. to replace 1000 cu ft of the natural gas. At 12 cents per gal. the propane to replace 1000 cu ft of natural gas will cost \$1.32. If 103,000 Btu per gal. butane is used it will require about 9.7 gal. to replace 1000 cu ft of natural gas and cost \$1.16 for butane. There is little if any advantage of one gas over the other except cost.—Ed.



Advantages of propane for making maple syrup

Ohi

Here in maple-syrup-producing Geauga county, several evaporators are equipped with oil-fired burners. I have had several inquiries on using L.P. gas for this job.

What type of equipment is recommended for this use? Evaporators are from 4 by 12 ft to 5 by 16 ft. Forty gallons of sap must be evaporated to make 1 gal. of syrup. Temperature of sap is about 40 deg. before entering evaporator. Oil-fired equipment for evaporators are about \$500 in this area, and it costs \$1 to boil sap for 1 gal. of syrup. No. 2 oil is 15 cents and propane gas is 17 cents.

P. T

An article, "Maple Syrup Producer Cuts Costs by Cooking With LPG," in February, 1956, BUTANE-PRO-PANE News pictures and describes equipment used for evaporating.

Many evaporator manufacturers are supplying gas burner equipment for syrup production. Contact: Corcoran Mott & Co., 7th & Myrtle St., Louisville, Ky.; Vermont Evaporator Co., Inc., Ogdensberg, N. Y.; The Leader Evaporator Co., Burlington, Vt.; Zalle Bros. & Johnson, 800 Locust St., Wilmington, Del.

The following manufacturer gas burners that can be used to fire these evaporators: North American Manufacturing Co., Cleveland, Ohio; Western Products, Inc., 38th Road, New Castle, Ind.; Bryand Industrial Products Corp., 17700 Miles Ave., Cleveland, Ohio.

No. 2 oil at 15 cents per gal. will be hard to beat with 17 cents per gal. propane, since the oil contains about 130,000 to 135,000 Btu per gal. to 91,000 to 92,000 Btu per gal. for propane. However propane has several advantages which will go a long way toward beating the oil cost: Better combustion with greater efficiency. Less localized "hot spot" burning to provide more uniform heat transfer

and least chance of scorching the syrup as it thickens. Better control of the fire. No electric power required for pumps and burners. Longer life and less maintenance of burner and evaporator equipment.—Ed.



Information available on heating concrete floors

Illinois

I would like information on installing radiant heat in a concrete floor to be used for pig farrowing.

I am interested in knowing proper method of sizing coil and length of coil and estimated input.

W. M. S.

The Copper & Brass Research Association, 420 Lexington Ave., New York City, publishes a small book describing and recommending methods of installing tubing for radiant heat in concrete floors.

They will be happy to send you a copy free of charge, and may be able to furnish additional information on the specific problem.—Ed.



Reasons for "breaking in" new trucks on gasoline

South Dakota

We are getting three new International trucks and the dealer tells us that propane should not be hooked up to these trucks for fuel until after they have run at least 2000 miles on gasoline.

Can you give us any information on this?

G. J. W.

We cannot find that there is any factory policy involved in your International dealer's recommendation that your new trucks should not be converted to propane until they have run at least 2000 miles on gasoline. Based on what we know about truck operators, there is probably more good sense in his viewpoint than appears on the surface. Here is the situation:

The average truck operator will not take the time to break an engine in properly before he puts it to work on his heaviest run and hottest schedule. It takes considerably longer to break in an engine on propane than on gasoline. Breaking in is wearing

On time on FIRESTONES!

They cut costs on LP-Gas deliveries

Whether you operate one truck or twenty trucks, count on Firestone Rubber-X, the longest wearing rubber ever used in Firestone truck tires. It's yours with every Firestone, for extra trouble-free deliveries and lower truck tire costs.

And along with new long-wearing tire rubber, all Firestones bring you Firestone S/F (Shock-Fortified) cord for still more stamina and dependability. No wonder more and more truck owners like yourself find it good business, always, to buy Firestones when replacing old tires—and to specify Firestones on all new trucks. Ask about them today at your nearby Firestone Dealer or Store—your headquarters for fast, reliable service!



TRANSPORT SUPER ALL TRACTION



LOOK FOR NEW LOW COSTS PER MILE WITH LONG-WEARING FIRESTONE TRUCK TIRES

Firestone BETTER RUBBER FROM START TO FINISH

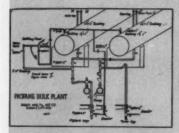
Copyright 1959, The Firestone Tire & Rubber Company

Your One Supplier with everything in L.P. gas and Anhydrous Ammonia Equipment



PASLEY-DESIGNED Truck
Tanks (see above and right)
were first to feature all
controls from one location.
All operation is from one
point—rear compartment.





BULK PLANTS Pasley LPG and Ammonia type installations—a turnkey job or engineering for your own installation. Write, wire or call.

Also a complete line of accessory equipment.

"Pastels By Pasley"

COLOR — The Modern Trend! Bring your LPG Equipment up to date. Available in the following colors . . . (write for information)

Blush Peach Sunshine Yellow Mustard Lime Eureka Orchid Lake Blue Smoky Grey Seafoam Blue Wedgewood Green Rose Beige Desert Rose



*EVERYTHING IN LPG AND ANHYDROUS AMMONIA"

The Pasley Mfg. & Dist. Co.

int that 11th Street . Kansas City, Mo. . Tel. Victor 2-2369

in, and if the parts are not properly smoothed together before the engine is required to pull a continuous heavy load, there is considerable danger that the pistons will stick or scuff. Your dealer is trying to introduce a factor of safety against a rather natural error of human judgment.

You could break the engine in properly on propane, but it would take considerably longer than would be the case if you took his advice and gave it the preliminary period on gasoline. What you do in this respect is up to you, but it seems to us that your dealer is making a sincere effort to help you.—Ed.



Propane vs. acetylene for steel cutting

Australia

We read with great interest your booklet, "Operating an L.P. Gas Business — Volume No. 8 — Industrial Application." Of particular interest was "Industrial Propane Gains Ground," which suggests replacing acetylene with propane for flame cutting and other uses.

Conflicting stores have circulated on the oxygen consumption using propane oxygen for steel cutting. We believe, that as a rule the oxygen requirements are the same. Our competitors in the acetylene field, however, state that propane uses more oxygen.

Could you forward us more information on this subject with particular reference to oxygen consumption for cutting different lengths and plate sections?

The article states that one cylinder of propane containing 2,125,000 Btu is equivalent to 8.86 cylinders of acetylene containing 3,300,000 Btu when used in flame cutting. Can you explain why?

D. S. R.

An article, "Flame Cutting—Likely Spots for LPG Use" in the March, 1956 BUTANE - PROPANE News, will answer many of your questions and will provide you with information to prove LPG is economical. Also, it will guide you in a method to set up your own cost analysis of the two methods of cutting. "New Savings in Propane Torch Metal Cutting", (July, 1957) will also help.

The acetylene suppliers are going to give you a hard battle as they do not intend to let any other fuel take this lucrative business from them.

You'll close more appliance sales when you use this handy COMPETITIVE COST CALCULATOR



Now... with this authoritative, convincing sales tool, you can prove to your prospects quickly, easily, and simply that LPG costs less than electricity for cooking and water heating. Money talks with most people, so dramatize the savings with a Competitive Cost Calculator.

Compares the average annual cost of operating LPG versus electrical appliances, using your own local rates

Proves to your customers' satisfaction that it's less expensive to cook and heat water with LPG than with electricity.

It's authoritative! Average annual usage figures for both LPG and electricity are taken from Technical Bulletin 1073 prepared by the U. S. Department of Agriculture. It will last for years. Made from durable plastic-laminated board.

LPG OPERATORS-

The Competitive Cost Calculator builds fuel sales as it builds appliance sales. Hundreds of LPG appliance salesmen are using the Calculator to add authority to their sales presentations. Be sure each of your salesmen has one with him on every call.

\$1.00 each

Orders of 50 to 99—80¢ ea.
Orders of 100 or more—70¢ ea.
(In California add 4% Sales Tas)
The supply is limited

so order today!

Butane-Propane News 198 S. ALVARADO STREET LOS ANGELES 57, CALIF. We suggest you try your tests on a plant which has mainly long cuts with a minimum of starts. Also where cleanness and squareness of the cut is of prime concern.—Ed.



Boiler rating

Manitoba, Canada

What is the relationship of Btu input to boiler horsepower rating?

We are in the process of rating inputs on boilers in our area, due to the coming of natural gas, and some have to be put on propane as natural gas is an interruptible service at present.

G. H.

It requires about 50 cu ft of natural gas or one-half gallon of L. P. gas to deliver a boiler horsepower. This will vary according to the efficiency at which the boiler operates. It is a satisfactory rule of thumb method of estimating the heat input required for a steam boiler.

The problem is to determine how many horsepower the boiler can really deliver. The older boilers could produce far above their rated capacities. For instance, a 100 hp boiler when properly equipped with burner capacity, correct baffles, etc., could actually deliver 150, 200 or even more hp per hour.

The capacities of boilers several years back were stated in terms of an irrational unit, the boiler horsepower. Without going into details, this corresponded to the evaporation of 34.5 lb of water per hour from water at 212 degree F to steam at 212 degree F and amounted to 33,472 Btu per hour. In later years a more realistic rating has been provided and many boilers are now rated in the pounds of steam they can generate per hour instead of boiler horsepower.

The new "unit of evaporation" is equal to 1000 Btu. This is the output rate of the boiler and boiler efficiency must be considered to determine the input required. Thus, for every 1000 Btu output rating, an input of 1250 Btu is required at 80 per cent efficiency, 1430 Btu at 70 per cent efficiency, 1667 Btu at 60 per cent efficiency, etc.

Boilers for heating are now generally rated by actual test and boiler input and output ratings are given. The Heating, Ventilating and Air Conditioning Guide, published by The American Society of Heating and Ventilating Engineers, 51 Madison Ave., New York, has information on the various methods of rating.—Ed.

Don't Sell Old Fashioned
Hotplates . . . Sell the new

CAMPMASTER

PORTABLE LP COOKING OUTFIT



uses

ANY REFILLABLE

LP bottle

PERFECT FOR HUNTERS
BOATSMEN
CAMPERS
CATERERS
DEMONSTRATION
ETC.

All Aluminum-won't rust

Lightweight-only 9 lbs.

Low operating cost. Only 1/10 cost of "throw away" or disposable type fuel cans.

Compact—Windshield folds into bottom of stove—hose and regulator rolls up inside. Complete package only 4" high x 10" x 18". SNAP-ON COUPLER lets your customer connect CAMPMASTER to any standard gas bottle without using tools.

Order for display NOW

Campmaster is just what some of your customers are looking for

COMES COMPLETE with: folding aluminum windshield, 4 ft. hose, regulator, snap-on coupling & POL adapter.

List price | 1 lot | 12 lot | \$29.95 | \$19.97 | \$17.97 | TORCH ATTACHMENT | 6.67 net LANTERN ATTACHMENT | 16.64 net

2 burner aluminum hotplate only

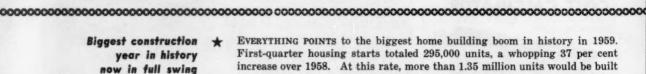
11.00 net

HOME GAS EQUIP. CO.

1301 Carnegie Ave. SU 1-5717 Cleveland 15, Ohio Dept. BP-6

WASHINGTON REPORT

by NEIL REGEIMBAL, Washington Editor

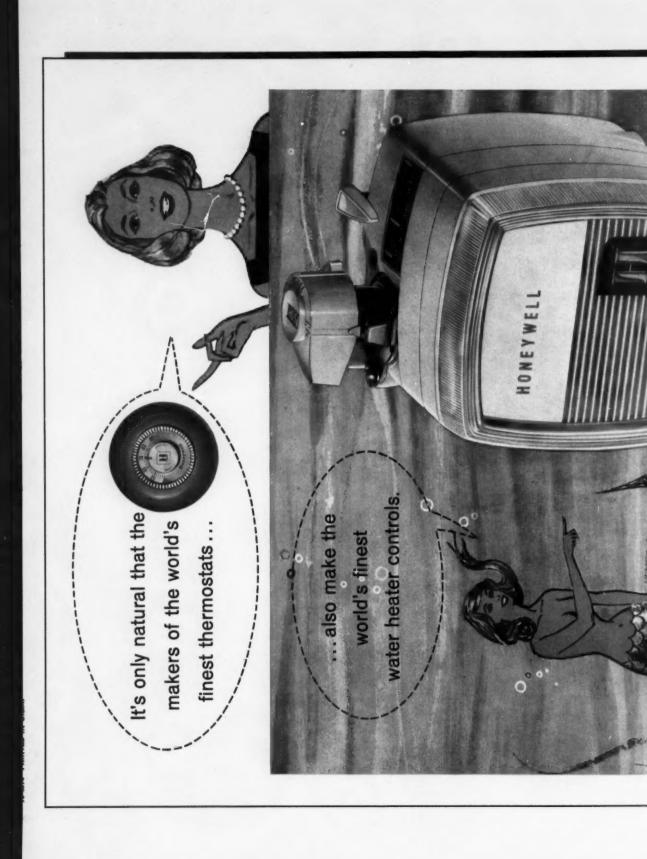


- EVERYTHING POINTS to the biggest home building boom in history in 1959. First-quarter housing starts totaled 295,000 units, a whopping 37 per cent increase over 1958. At this rate, more than 1.35 million units would be built in the 12 months, putting it 30,000 ahead of the previous best year, 1955. Why the boom? More mortgage funds are available, down payment requirements are lower, and Congress is expected to pass a huge new housing bill. One obvious result: more appliance sales, more gas sales.
- Harder selling of durable goods badly needed
- BUT THERE'S A SOUR NOTE IN THE SYMPHONY. Consumers are spending a higher percentage of income on services and less on appliances and other durable goods than in the past. The percentage of personal income after taxes spent on furniture and household equipment has dropped from a high of 6 per cent in 1955 and 1956 to 5.5 per cent. Obvious conclusion: durable goods need harder promotion than they did in the past.
- Jobless pay proposal may nick employers
- YOU MAY HAVE TO PAY HIGHER unemployment compensation taxes if a proposal of Senator Kennedy passes. The Massachusetts lawmaker wants to extend jobless pay in all states to 39 weeks, boost payments to two-thirds of the average wage. Coverage would be extended to firms with one or more workers (present law, four or more); the employer's 3 per cent contribution would be extended to include the first \$4200 of salary instead of the first \$3000, as now. The Kennedy bill would also knock out the merit rating for firms with little turnover.
- Tax deductions for retirement plans proposed
- THE HOUSE HAS OKAYED TAX-FREE RETIREMENT PROGRAMS for self-employed persons. But the Senate is balking at the proposal to grant tax deductions for funds invested in such plans. If passed, the bill would permit deductions of 10 per cent on net earnings up to \$2500 a year.
- Washington, briefly
- HANDICAPPED WORKERS would rate their bosses an extra tax deduction (20 per cent of each worker's annual salary) as a business expense under terms of a measure now pending in the House. Theory: it would spur hiring of such persons Congress is drifting closer toward price-wage control legislation to curb inflation. All-out control is unlikely, but a modified plan to hold hearings on proposed price boosts in basic industries, then threaten controls if "unwarranted" increases are effected anyway, is gaining support Kefauver is pressing for a cabinet-level "Department of Consumers" to put "pressure" on prices The Small Business Administration is coming under Congressional scrutiny for alleged delays, red tape, lack of effectiveness in administration of loans and the new Small Business Investment Act The Supreme Court has decided that anti-trust laws protect retailers as well as the buying public. The court upset lower court rulings in holding that an appliance retailer's suit against manufacturers' and retailers' conspiracy to discriminate against and boycott him was justified under anti-trust laws.
- Ike vetoes REA reorganization bill
- ON APRIL 30 THE REA REORGANIZATION BILL DIED, failing to override President Eisenhower's veto, falling short of the required two-thirds by just four votes.

 (Details on pages 74-76)

YOU HAVE MORE TO SELL WITH CONTROLS BY HONEYWELL... NOW NATIONALY ADVERTISED TO YOUR PRIME WATER HEATER, **PROSPECTS** 0 0



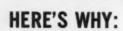




Shown above is the deluxe model V5131. Available with long or short element or tube --- with or without pressure regulator.

American Home and Sunset magazines, preselling Honeywell-This full-color ad will appear in over 4,000,000 copies of equipped water heaters! It's just one more reason why-"You Have More To Sell When You Sell Honeywell"

You sell more water heaters when they're equipped with Honeywell Controls

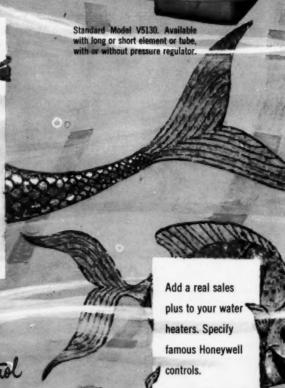


- TOP SETTINGS—of both temperature and gas cock-mean greater convenience.
- PRESSURE REGULATOR—built right in properly located in gas stream. Models available without pressure regulator.
- SAFE LIGHTING INTERLOCK—prevents accidental turning of gas cock to off position, once it has been put in pilot position.
- UNIVERSAL DUOFILT FILTER—the same filter resists clogging by both dust and gumworks on all gases.
- BEST OF ALL—THE NAME HONEYWELL on the control-a name your customers know and respect.

Honeywell



H First in Control

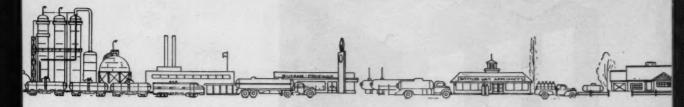


TENY

taby 00 代的第

HIGHLIGHTS





Another year of significant accomplishment was concluded by the LPGA at its 29th annual convention in Chicago in May. The presidential reins for the new year were taken over by First Vice President F. Leslie Fagan of Gem Automatic Gas Co., Granite Quarry, N. C. Second Vice President Rudy J. Munzer of Petrolane Gas Service Inc., Long Beach, Calif., moved up to Fagan's old spot and Munzer's place was taken by E. O. N. Williams of Bottled Gas Corp. of Virginia, Richmond, Va.

Meeting during the convention, LPGA's board of directors voted to investigate staging a national <u>Miss L.P. Gas</u> contest for girls 18 to 21. One of the proposed qualifications: a theme on LPG cooking.

A plea for financial help was made to LPGA directors by Frank Hodgdon, head of AGA Laboratories. The reason: increased burdens raised operating expenses. Concensus was that LPGA would help.

BPN's eighth dealer and manufacturer roundtable again preceded the convention. Full reports on both will appear in June BPN.

A plan to compensate LPG dealers when spreading gas utility companies take away their customers has been successfully inaugurated in Minnesota. Two utilities (one a gas-electric combine) are paying LPG dealers up to \$48 per customer. A 48-month adjustment period was set up. LPG dealers receive \$1 per customer for each month (during that period) that the customer is off LPG.

Flooding oil fields with propane substantially increases the amount of oil that can be extracted, Standard Oil Co. of California concluded after a 14-month experiment at its Taft (Calif.) fields. The effect is similar to that of washing oil out of a sponge with kerosene. Standard injects 50,000 gal. of propane per day, must truck it approximately 125 miles through Los Angeles traffic and over mountains, still finds the experiment profitable.

HIGHNOTES: American Standards Assn. has formed a subcommittee to set up requirements for gas exterior lighting. . . . Eight-year-old Suburban Propane Ltd., Toronto, already eastern Canada's largest, just bought three Quebec LPG companies for \$1 million. . . . Spectacular one-year growths of 47 per cent in assets and 15 per cent in net income were announced in the 1958 annual report published by Petrolane Gas Service Inc., Long Beach, Calif. . . . An upgrading measure sponsored by the Texas Butane Dealers' Association to codify and clarify the existing patchwork of statures, regulations, and practices died without ever reaching the floor of a Texas legislature that spent too much time on state financial problems. . . . Gas appliance sales figures, continue to rise with ranges and dryers showing 15.9 and 48.0 per cent increases, respectively in the first quarter and boilers up 40 per cent in March.



world's finest two-stage regulator outfits now COMPLETE SINGLE PACKAGE!

ONE NUMBER COVERS EVERYTHING

Now, merely by specifying one Outfit Number, you get the complete RegO Two-Stage Regulator Outfit you need—pigtail for connecting to service valve; first-stage Red Giant regulator for delivery pressures of 1.5 psi, 5-10 psi, or 10-15 psi; and the famous RegO second-stage regulator delivering uniform flow at 11" W.C. . . . all for loads up to 625,000 btu (250 cfh) or 1,250,000 btu (500 cfh).

Options include: pressure gauge on first-stage regulator, mounting bracket for second-stage regulator, and a suppressor assembly that eliminates pressure pulsations caused by the impedance of vent piping when second-stage regulator is installed inside a building. Just one number specifies everything—saves your time in selection and ordering . . . assures over-all balanced components.

WRITE FOR THIS HELPFUL NEW FOLDER

New RegO Folder L-417 explains when and how to install two-stage regulation . . . the resulting economies, including minimizing of freeze-ups . . . the importance of suppressors for pressure uniformity and safety protection . . . simplified RegO "package" numbering.

Also included are charts showing recommended line sizes between first- and second-stage regulators as well as between second-stage regulators and appliances, a typical installation diagram, and a table of minimum distances governing location of stationary tanks with respect to buildings. Nowhere else will you find all this information so convenient for instant reference. Write today!







SECOND-STAGE REGULATOR







it will pay yo



The BASTIAN - BLESSING Company

4207 West Peterson Avenue, Chicago 46, Illinois



Tomorrow's Tomatoes Today—

with an assist from LPG

Soilless Grown

Fiver Produce of U.S.A.

Rendal-lite Brand

Kendal-Florida

Hydroponic tomatoes command prices of \$1 to \$2 more per box in northern markets. Closely controlled growing conditions, including identical food 'atake, result in a uniformly high quality product, said to have both finer taste and a better appearance.

EDWARD G. DICKSON

TODAY'S scientists frequently predict that in tomorrow's commuter-rocket-to-the-moon way of living, a meal will be a simple pill-downing session in which to-day's favorite foods will be reduced to tiny bundles of taste and energy.

Most of us with normal taste buds sincerely hope not!

More sober reflection on the probabilities of the future brings the happy realization that food will probably continue to taste like food—only better. The role of science will be to improve quality and crop yield. More food with less effort, in other words.

Actually, this will be but another state in the scientific revolution on the farm, already well under way. This has begun to mean a great deal to the LPG dealer who has taken advantage of it. Flame cultivation and orchard frost protection are two new devices which have meant good loads for the alert marketer.



"Before" and "After" photos of a portion of the Fred B. Jackson hydroponic tomato farm show the gravel-filled, water-covered tanks before planting and the same tanks

One of the newest techniques on scientific farming—and one which may mean a great deal to the LPG dealer—is "hydroponics," the science of growing "premium" foods under laboratory conditions.

Hydroponics means, literally, "water labor" farming, and it also goes under the names of tray agriculture, tank farming, and water culture. It consists of letting plants take root in sand or gravel through which passes a water solution of the mineral nutrient salts essential to growth. Because this solution can be rather highly concentrated, the entire operation can itself become quite concentrated. This means, among other things, exceptionally high crop yield from a very small area. Most important to the LPG dealer, it means the hydroponic farmer can make a living by cultivating an outdoor area small enough to be

efficiently heated by indoor methods, and in a location ideally suited to the use of the gas.

Just such a farmer is Fred B. Jackson of Kendall, Fla., a Miami suburb. One of the pioneer hydroponic farmers, he has raised tomatoes by this method for ten years and is president of the Florida Hydroponics Growers Cooperative Association. On his 100 x 150 ft farm, he has a total of 23,000 lineal ft of tomato beds, which during a five-month period beginning late in November, produce some 48,000 lb of tomatoes. A medium sized operator, he also grows cucumbers in summer.

During those ten years, Jackson has spent many strenuous nights with his crops, burning railroad ties to create a smudge and flooding his tract to ward off the occasional winter frost that hits the area. Much additional time was

spent in collecting and storing firewood and old tires for smudging.

He became interested in an LPGsupplied crop protection system after reading of a Georgia tobacco grower who used infra-red heat to protect seedlings.

Jackson installed an experimental infra-red system last winter. The season turned out to be so mild that the set-up was used only four times and results were far from conclusive. Yet Jackson regards the experiment as a success—so much so that he plans to install enough LPG-fired units to warm the entire farm before next winter's crop is on the vines.

To understand the heating system, one must first understand the basics of hydroponic farming, particularly as practiced by Jackson.

There are two chief methods of hydroponic farming. One uses



months later, covered with a jungle of tomato vines. LPG-using infra-red heaters may be seen in the background in both photos.

sand to catch and hold chemicals for the roots. It must be confined chiefly to roofed-in areas where rain can't upset the process. The system used by Jackson utilizes gravel.

Jackson's farm consists of rows of concrete tanks containing silica gravel. Under the gravel, drain tiles lead to a central drain, which, in turn, leads to an underground 20,000-gal. tank which is used both for storage and for mixing chemicals. Exterior equipment includes a pump which brings up water from the tank into a flume, from which it is directed into lateral lines for each tank.

Twice a day, Jackson pumps a fresh solution into the gravel beds. He explains the feeding process as "removing a thin film of liquid from the gravel and replacing it with a newly fortified film." After the concrete tanks are filled to the proper level, the pump is turned off and the tanks drain by gravity, the water going back to the underground storage tank.

The vines take root in the gravel, obtain their food from the newly enriched film, and are trained upward on wires.

The resulting tomatoes (and cucumbers) have a finer taste and appearance, and command prices of \$1 to \$2 more per box because of this quality factor. Hydroponically grown crops are more uniform because growing conditions are controlled and the food content is the same. While such farming is more expensive, the compactness of the farm enables the farmer to protect his crops much more effectively, thereby saving a greater percentage from potential loss and reducing the number of culls.

Florida hydroponic farmers

have been able to protect their crops from cold weather fairly well by using smudges and diverting their pumping equipment to spread water on the ground surrounding the concrete tanks. Because damage to tomatoes and plants begins as soon as the temperature hits 45 degrees and gets proportionally worse as the mercury drops, back-breaking nights of flooding and smudging can become quite frequent in bad years. Still, the results were not always certain, and a farm the size of Jackson's could easily suffer a lowered-quality loss of \$1000 to \$3000 per season. (Cold weather rarely completely kills a crop.)

To protect himself against this kind of loss, and to avoid the nights of flooding and smudging, Jackson decided to invest \$1000 in an experimental set-up which

(Continued on page 28)

NOW! CERTIFIED PROOF FORD TRUCKS COST LESS



'59 Ford Pickups beat average mileage of other leading makes by 25.2% in Economy Showdown U.S.A.

Here at last is certified proof of the differences in gas mileage between six-cylinder pickups . . . evidence that you can use in your operation.

It was compiled by America's foremost independent automotive research firm after testing 1959 six-cylinder, %-ton pickups of the six leading makes. All trucks were bought from dealers—just as you would.

The tests paralleled every kind of driving — high speeds and low, open highways and city traffic, even door-to-door delivery. And in every test, '59 Ford Sixes delivered more miles per gallon than any other make. Here are the actual percentages:

HOW NEW '59 SIXES RATE IN GAS MILEAGE '59 FORD SIXES More miles per gollon more miles p

Taken together, Ford got 25.2% more miles per gallon than the average of all other leading pickups!

What's the secret of Ford's economy? First, of all pickup sixes, only the Ford Six has modern Short Stroke design which reduces engine friction and thus requires less fuel. Second, to this modern engine, Ford has added a new economy carburetor to meter fuel more precisely in both high- and low-speed ranges.

See your Ford Dealer for the complete report of Economy Showdown U.S.A. Visit him today and get the whole story firsthand.

NOW! DURING DIVIDEND DAYS AT YOUR FORD DEALER'S...

Go FORD WARD for savings



C. H. Gardner
Manager
Sungas Service
Raleigh, N. Carolina
says:



"Low operating cost keeps us sold on the Ford Six!"

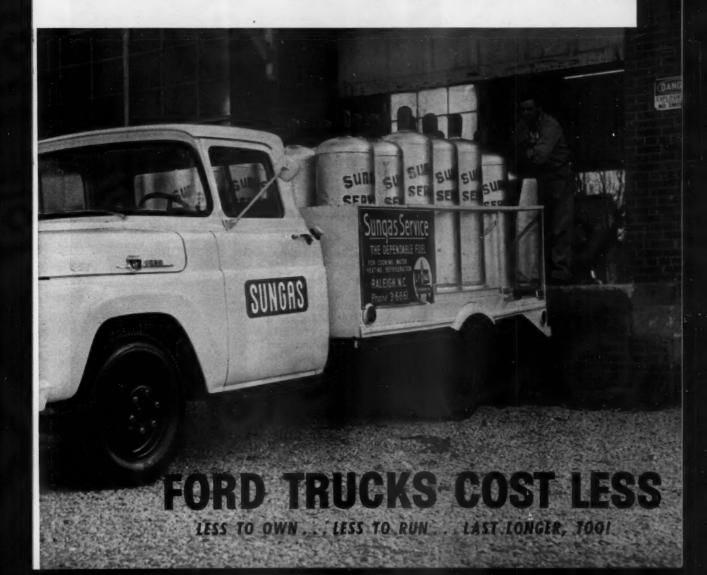
"Gas, oil, tires, maintenance and repairs for our F-350's run us only 8.93 cents per mile.

"Our seventeen Ford Trucks, equipped with 6-cylinder engines, ran 83,487 miles in 1958 with a total operating cost of \$7457.04. That's only 8.93 cents a mile and includes all our Ford Truck expenses except depreciation and insurance.

"We carry 28 cylinders on our F-350's which means a peak load of nearly 5,000

pounds. They average 8½ to 9 miles per gallon which is very good when you consider that each truck makes about 50 deliveries a day with 85% of them in the rural areas. Oil consumption is practically nil since we change oil every 1,500 miles.

"Another reason why we keep on buying Ford Sixes is that they cost less to maintain. We get the horsepower we need at low rpm which not only means longer engine life, but it's much easier on the clutch. We are firmly convinced that the Ford Six is the best engine for our operation."





Using a homemade torch. Jackson lights one of the infra-red heaters. Better lighting system will be employed in permanent set-up.

(Continued from page 25)

he thought might protect half of his farm. He contacted Grant Degan of Magic Infra-Red Heat, Miami. Degan helped him plan the installation, sold him the equipment and helped him put it in.

Along one side of the farm, they installed nine Schwank infra-red heaters, each pointed downward toward the plants. Each heater is a two-rayhead unit that produces 12,000 Btu per hour. Manufactured by Perfection Industries Inc., Cleveland, they provide heat without open-flame combustion, generating it in ceramic catalyst mats that contain thousands of tiny holes. In the experimental set-up, all units drew their fuel from the same line, fed by a pair of 100 lb upright switch-over cylinders. Galvanized pipes on posts serve the dual purpose of supplying LPG and supporting some of the heating units.

To start the system, Jackson turns on a valve at the tanks, then lights each burner individually, using a homemade torch with a long handle.

Because infra-red heaters throw their warm rays at anything in range and do not dissipate it in the air, they are practical for such outdoor installations. During his experiments, Jackson felt definite warmth at 30 ft from the heaters, or approximately one-third of the way across the farm. He believes the warming effect probably extended farther than that and that a second row of heaters placed in the middle of the farm would result in complete protection for the entire 100 ft width.

For the nine heaters, LPG consumption runs at about 12 lb (or \$1.25) per hour. Gas is supplied by Major Gas Co. of Perrine. A long night's run would be eight hours. Usually however, it is shorter than that, for the heaters

reduced if the ceramic units became wet. They do not function properly until dried out.

The final modification Jackson plans is an as-yet-not-worked-out system to light the burners, something to take the place of his homemade torch.

Jackson is so sold on the set-up—despite his brief experience with it—that he recommends it not only for hydroponic farmers, but for all growers of concentrated crops, including nurseries.

Certainly, here is a load building possibility that could only get bigger and bigger as laboratory methods spread to farms.



Close-up of one of the nine Schwank infra-red heaters.

do not have to go on until the thermometer dips below 50, and that usually does not happen until after midnight. While happy with the set-up, Jackson plans three changes in addition to the second row of heaters.

The two 100 lb cylinders were inadequate, even on an experimental basis, so he will install a bulk tank. Jackson had been plagued by cylinder freezing. The nine heaters used gas faster than heat from the atmosphere could be transferred to liquid in the tank, thus causing frost on the outside of the cylinders. Continued reduction in the liquid temperature eventually interrupted the gas supply.

Jackson also plans to install some sort of rain hood over the heating units. Rain did not extinguish the units, but he found that the heat release was greatly



The two 100 lb cylinders used in the experimental set-up proved inadequate, will be replaced by a bulk tank. Note heater in background.



... keep profits fenced in

A Sid Richardson Gasoline Co. contract can help you build a fence to keep profits from getting away from you. With a Sid Richardson contract your profits are protected by —

Our long-time, unbroken record of making deliveries on time in winter as well as summer.

Voluntary price reductions to enable our customers to be competitive.

Top quality product at all times.

Unsurpassed co-operation (we have no company-owned wholesale or retail outlets competing with our dealers)

Let us help you build your fence for protecting your profits.

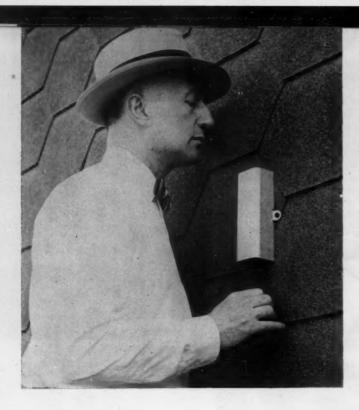
Sid Richardson

GASOLINE CO.

629 FORT WORTH CLUB BUILDING . FORT WORTH, TEXAS

REGIONAL REPRESENTATIVES

H. M. JONES 5123 NO. NEW JERSEY INDIANAPOLIS, INDIANA MARVIN L. DOSS 1118 GREEN STREET ABILENE, TEXAS B. E. PATTON 6446 XERXES SO. MINNEAPOLIS, MINN. G. C. ANDERSON 7737 HAMILTON ST. OMAHA, NEBRASKA



The compact box into which Cliff Holland of Red-E-Gas is peering holds the thermostat which automatically switches from city gas to LPG when the temperature drops below 25 deg.

A dual-fuel load! Why not?

asks Red-E-Gas of St. Louis

Many dealers look upon dualfuel setups (utility gas for the firm load, LPG for winter peaks) as a profitless nuisance. Most of those who participate in such plans accept their position as peak-load supplier with an air of resignation.

But it's an ill wind that doesn't blow somebody some good, reasons Red-E-Gas Co., St. Louis, which not only accepts this sort of arrangement as inevitable, but feels it's a worthwhile load. Here's why...

If a St. Louis LPG dealer won't sell much gas under a dual fuel set-up (which he won't), and will lose the customer's business entirely in a couple of years (no matter how good a job he does), why should he bother with dual fuel?

On the face of it, it may seem that he shouldn't, and probably won't. But actually, there are more than 5000 residences and businesses in St. Louis and St. Louis County that are being happily serviced by LPG dealers who are supplying propane in cylinders or in bulk to these customers as cold weather standby fuel.

The local gas heating situation is this: The Laclede Gas Co. has enough natural gas to fill the space heating needs of most of its customers — until the temperature drops below 25 deg. Then, the utility begins running short, and requires a portion of its customers to go off of natural gas and onto another fuel. Most often this other fuel is L. P. gas, but occasionally it's oil. On these dual fuel set-ups, a thermostat switches fuels automatically at 25 deg.

However, Laclede is currently pumping gas into a natural underground storage dome in north St. Louis County. This gives the utility a huge reservoir to be filled in the summer and drawn upon in the winter. Within the next few years, Laclede expects to have the dome at maximum capacity. It will then be able to fill all the heating needs, not only of the customers now on dual fuel, but also of the thousands who are on a waiting list for straight natural gas heat.

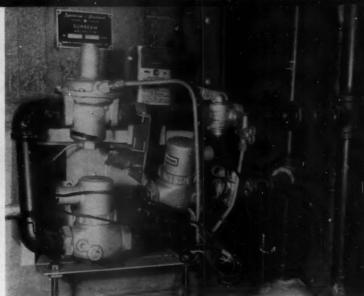
In the meantime, the utility is gradually increasing its cold-weather reserves, and telling some dual fuel customers and some on the waiting list that they can have straight natural gas heat. In the past year, permits for it have been granted to 10,000 homes and a smaller number of businesses. Some were on dual fuel, others were heating with coal or oil.

Permits are granted strictly on a first-to-ask, first-to-get-served basis. A wait of two to three years between application and permit has been about average.

According to Laclede, the dual fuel customer gets his heat from natural gas 75 to 77 per cent of



This control box, in the basement of the house, is activated by the exterior thermostat. It contains relays which control solenoids on the natural gas and LPG lines.



At the fuel inlet to the furnace, the natural gas solenoid is located at left, the LPG solenoid is at right. The pilot light, like all other gas devices except the furnace conversion burner itself, continues to burn natural gas during the period the furnace is operating on LPG.

the time, and from L.P. gas (or oil), the remaining 23 to 25 per cent of the time. St. Louis winters are erratic, and ofter bitter, but prolonged cold spells are not the rule.

What it all adds up to for the LPG dealer is a little bit of business for a relatively short period of time. For the answer to why he bothers with it, BUTANE-PROPANE News interviewed Clifford B. Holland, a director of the Red-E-Gas Co., which supplies more than 300 dual fuel customers.

"We don't expect to sell a lot of gas to these customers, but we do see a real value in their business," Holland declared. "We are amortizing a part of the cost of the cylinders or tanks they use, so we have a tank we can sell to the next customer—dual fuel or full LPG—at a greater profit.

"We are holding a lot of customers for gas who might otherwise have switched to oil or stoker coal when their furnaces went bad and they couldn't get a full natural gas permit. Laclede benefits most immediately from this, of course, but it helps us too for this reason:

"We operate in four counties around St. Louis—including areas into which the city's population is rapidly moving. Although Laclede is spreading its mains into part of these areas, the population is spreading faster and farther.

"So when we keep a customer for gas, and keep him 'gas educated', we know there's a good chance he'll be an LPG customer, again in a few years. In the meantime, if he's a satisfied customer, he'll tell his friends, and some of them may be moving out into the LPG area."

Red-E-Gas, headed by E. A. Reutner and E. K. Love, Jr., has annual sales of nearly 3 million gal., and is the largest independent LPG dealer in eastern Missouri. The firm has been servicing dual fuel customers for as long a period as any dealer in the St. Louis area.

"We work with 42 heating contractors," said Holland. "When they install a dual fuel job, they run a line through the wall for L. P. gas, and call us when it's all ready. We just hook on—either three cylinders or a 100-gal. tank for residential set-ups, or larger tanks for commercial users. We also do some complete heating installations ourselves, but we don't push this end of our business because we don't want to compete with heating contractors."

At the time of the initial hookup, Red-E-Gas' first contract is with the heating contractor. Subsequent ones are with the customer. However, the residential customer may choose between buy-

ing the 100-gal. tank or leasing the three 100-lb cylinders. The tank costs the customer \$132 without gas. The three cylinders, with an automatic change-over valve, lease for \$75 with gas. This includes the installation charge and the use of the "system" for as long as it is needed.

Being a short-range installation, it might seem that most residential customers would lease cylinders, but about half buy the tanks, Holland said.

"For one thing, we guarantee the customer that we'll buy the tank back from him for \$50 when he gets his permit for full natural gas. Then, with a tank, he gets his gas for 23 cents a gal. With cylinders, it would cost him 35 cents a gal. We also agree to keep the tank painted."

Also, the cylinder customer has the entire responsibility of seeing that he doesn't run out of gas. A red indicator on top of his automatic change-over valve tells him when two are exhausted and the system is drawing on the third, reserve, cylinder. Cylinder customers are advised to check the indicator daily during cold weather, because the reserve cylinder won't last more than a few days.

"If a customer has a tank, we'll stop by once a month to fill it, whether he calls us or not," Hol-



These 100-lb. cylinders supply LPG for the residence. Left and middle cylinders supply fuel until they run out, at which time the automatic change-over valve under the cover cuts in the cylinder on the right.

land said. "You can always fill a half empty tank. But there wouldn't be any point in stopping by before a cylinder customer calls, because we can't pick up a halfempty cylinder.

"Of course, there's a percentage gauge on the tank, and we advise the customer to keep an eye on it during cold spells. If he gets low before we're due, he phones us."

Deliveries to dual fuel customers are fitted into the regular daily routes of the trucks with very little difficulty, Holland said.

"In most cases, when they call we just add them to the delivery list of the proper truck—bottle or bulk—that will be going through their area in a day or two," he explained. "The only ones we go out of our way for are those in St. Louis proper, where we have no other LPG customers. But, we always have a truck going fairly near them, so it's no real problem."

Most tanks, 100-gal. or larger, are sold outright, Holland said. However, in the case of a good commercial customer, Red-E-Gas will sometimes lease a larger tank to protect itself against "pirating" of the customer by another dealer.

Of Red-E-Gas' 300 dual fuel customers, about 200 are residential, and 100 commercial. The latter have the greater gas gallonage, of course.

"We have a clause in our contract with the residential customer in which he guarantees to use a minimum amount of our standby fuel during the heating season—he must pay for at least three cylinders if he has a cylinder hookup, for example," Holland said.

"We were forced to do this by a certain amount of chiseling we ran into. Because natural gas is cheaper than LPG, some customers packed the switchover thermostat with insulation, others hung a light bulb beside it, while others readjusted the control box it activates to delay or prevent switchover to LPG.

The switchover thermostat is located on an exterior wall of the house—usually north or west—with a metal shield surrounding it but not covering it entirely. It activates relays in the control box in the basement. The control box is hooked up to two solenoids, one in the natural gas line, the other in the LPG line. The control relays open one solenoid and shut the other, depending on electrical "instructions" from the thermostat.

The furnace pilot light and all other gas appliances in the house work off of the natural gas line at all times. Only the furnace itself switches onto dual fuel.

Nearly 90 per cent of Red-E-Gas's dual fuel customers have gas furnaces. The remaining 10 per cent have conversion burners.

Laclede figures show that there are 3400 residential dual fuel users

in the St. Louis area, and 1800 commercial users. In addition, there is an additional group of commercial and heavy industrial users on "interruptible service." Laclede has a contract with them under which it can cut off their service whenever gas gets short—even above 30 deg., if the utility wishes to.

Interruptibles use a variety of standby fuels, to which they switch manually after being notified by Laclede that their gas will be cut off within a couple of hours.

With the completion of its underground reservoir, Laclede expects to be able to take full-time care of all these part-time customers as well as many thousands of new residential users the utility believes will apply for gas once its waiting lists have been satisfied.

However, Holland has no fear that natural gas will saturate the Red-E-Gas territory within the foreseeable future.

"If Laclede extends its mains out ½ mile, we extend our deliveries five miles," he said. "It'll be years before the natural gas mains reach some of the newer subdivisions which have already been constructed. And, if we ever need to, we can always move our office and bulk plant further west in St. Louis county, to shorten our routes, although a move like that would be many years away.

"We feel no pessimism for the future. We believe that LPG is a good product with a growing future. The trend away from the cities—evident here—is one big reason why."

With more than 100,000-gal, storage, Red-E-Gas is well equipped to take care of the peak strain imposed by the dual-fuel arrangement.



In CANADA... or CARACAS

PAYLOAD is what counts...

... here's one of several 3,000 WG T-1 Bobtails ordered from Trinity Steel by Canada's largest LPG distributor...



No matter where you operate, payload is the point . . . and that's why Canada's largest L-P Gas distributor, Superior Propane LTD., of Toronto, Ontario chose Trinity's 3,000 WG Bobtail, fabricated with T-1 to replace their entire fleet!

Trinity engineering and T-1 steel really count...more than 10% increase on every haul.

No matter where you are . . . Canada, Caracas or Clear Lake, Iowa, if you want that extra edge on profit, check with Trinity for tank trucks fabricated with T-1 . . . the wonder steel!

TRINITY STEEL CO., INC.

4001 IRVING BLVD./DALLAS, TEXAS, U.S.A./PHONE FLeetwood 7-3961

Latin American Division: Tanques de Acero Trinity, S. A. Calle Poniente 150 No. 734, Mexico, 16, D. F., Plant and Sales Office.



HOME



SchagrinGas' new 30,000-gal. tank has not only allowed the company to shave per-gallon delivery costs but it has served effectively as a billboard as well.



Neatness and ease of use mark the filling manifold arrangement.

Swing joints, through-flow valves features of new Delaware plant

N January 1, a new bulk plant was put into operation for the first time by SchagrinGas Co., of Middletown, Del. The plant is situated just south of the Wilmington city limits. The tank is a 30,000 gal. ACF and supplements

the 48,000 gal. of storage located at the main plant in Middletown.

Bill Merkel, company foreman, and Milton Levinson, vice president, designed the entire piping system. The main thought in designing the plant was to reduce everything to as simple a layout as possible, yet obtain a high flow rate of gas.

At present, the plant is used solely for loading tank trucks and unloading the transport, although the company plans at a future date to build a filling room and showroom adjacent to it. Schagrin-Gas had developed a substantial gas load in the Wilmington area, and this storage reduced the distance the tank trucks had to run from 25 miles to 5. In addition, the potential growth of New Castle county will result in a much greater usage of propane than has been the case in the past ten years.

Three-in. piping was used both from the bottom outlet direct to the pump inlet and to the transport unloading spot, where it was reduced to 2-in. A Corken liquid pump, Model 502 Coro-Vane, with a 5-hp motor, three phase, was

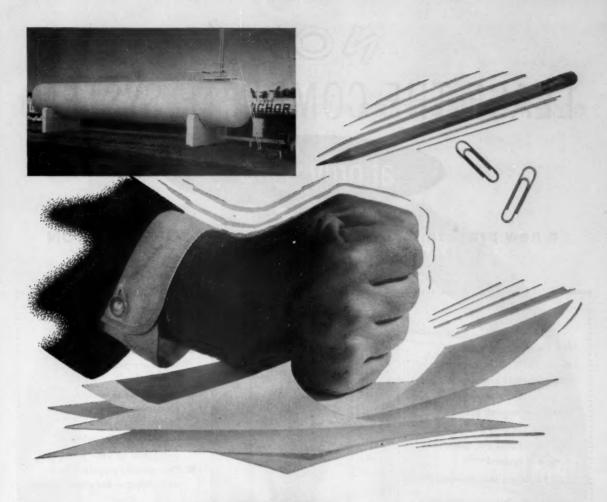
given the job of moving the propane. All main shut-off valves were Okadee or Rockwell. The ground upon which the plant was located was expensive, so it was necessary to make every foot count for the tank location and provide adequate clearances for all future buildings. A loading rack capable of handling two bobtails and one transport simultaneously was installed. This rack is equipped with swinging Chiksan joints and 2-in. liquid and 11/4-in. vapor lines. It has proved to be very practical in operation, keeping the hoses off the ground and dirt out of the valves.

A small fill hose was installed on the discharge side of the pump to take care of refueling motorfuel tanks and other miscellaneous needs. In actual operation 54 gpm can be pumped into the tank trucks and the transport can be unloaded at a 67 gpm rate.

The tank was painted gloss white and lettered brightly. Floodlights were installed and connected to a timeclock. This provides a good billboard that can be seen from two main intersecting roads adjacent to the plant. A cyclone fence surrounds the area to make the plant tamper-proof. During the past winter, the availability of storage close to the point of use has lowered per gallon delivery costs, resulting in higher unit profits.



Counterbalances on the filling hoses speed handling.



when you want ANSWERS right HERE! right NOW!

In your fast-moving L. P. G. industry delays can be costly, might be fatal! That's why Anchor makes it a point to be fast and flexible. You can call direct to Tulsa any time and find out what you want to know . . . On-the-spot, without waiting for a management conference or director's meeting. And the answers you get will be calculated to help you out; based on years of experience and nationwide facilities expressly designed to give you superlative service.

Although Anchor maintains sales offices nationwide, when your problem needs quick answers right from headquarters, you're welcome to call Tulsa CHerry 2-7261 direct. Thinking about a contract? Give that number a try, right now.

ANCHOR

PETROLEUM CO. . TULSA

SALES OFFICES: Toledo, Shreveport, Hattlesburg, Houston, Midland, Long Beach, Calgary.



I.WOW

LEASE THE COMPLETE SYSTEM

at only \$695*!

a new program of the BB LEASING CORPORATION

Mr. Dealer! Here's your opportunity to increase your gas load and expand your business at the lowest minimum capital outlay possible. For only \$6.95* a year, tax deductible, you get this complete system!*

*251 Packages Minimum Order

(Rental for smaller quantities and in Canada slightly higher)



- All new equipment, warranty-protected, ready to install.
- 10 year lease with favorable dealer purchase option at any time.
- Leases on single cylinders available 15 year plan.
- One annual payment covers everything — No other costs.

The complete package: Two...100 lb. ICC Cylinders, Two...21001 Cylinder Valves, One...551 LP-Gem Regulator, One...27004 Tee Check Manifold, Two...780 Pigtails.

For more information, contact the WEATHERHEAD representative in your area



LEASING CORPORATION

Subsidiary of The Weatherhead Company

300 East 131st Street . Cleveland 8, Ohio

another example of

Leadership rofit rowth

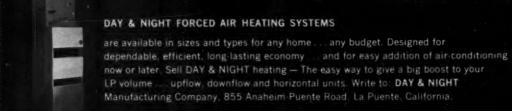
THE WEATHERHEAD WAY

The Annual BPN Househeating Sell-O-Rama



"Now is the time" to Sell Househeating





With summer's first days, homeowners begin looking forward to the coming winter and heating equipment sales start rising immediately, hitting their annual peak during August, September, and October. Since summer is the LPG dealer's traditional slack season and many dealers handle heating equipment, the situation is a "natural" for a heating equipment promotion that begins now and ends in late fall. BPN here presents its first annual househeating sell-o-rama with the hope that it will encourage dealers to work up a promotion that will break all of their current sales records!

"Now is the time" to Sell Househeating

In June, most people are busy mopping their fore-heads, running a finger inside a damp collarband, and generally wondering why they complained about last winter's frigidity. But for the L.P. gas dealer, June is the month when he must begin laying plans for a major househeating sales campaign that will soon be breaking, and there's hardly a moment to spare worrying about the hot weather.

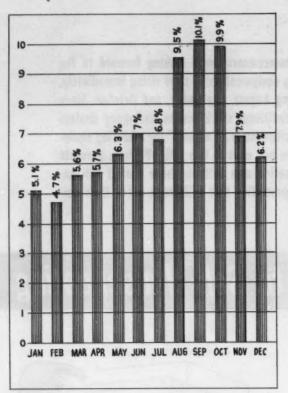
Just as clothiers are beginning to get ready for the winter styles, so must you begin taking stock of your market potential, setting up your sales goals, training your personnel, laying out a campaign calendar, ordering merchandise, and doing all the myriad things that must be done to prepare for the peak selling season just ahead.

Records of industry shipments of heating appliances bear this out. Movement of merchandise to dealers hits its lowest ebb right at the time when the househeating load is heaviest—December, January, February, and March. Usually April shows only a small increase, if any; but in May, the curve in shipments begins to rise. The upswing continues at a steady pace through June, July, and August, usually hitting its apex in September.

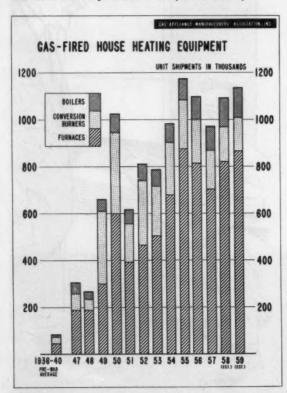
So you can sell househeating at this time of year. And there are many reasons why it is the best time of the year to sell.

For example, if you are typical, your work load has already begun to slacken off. Your employees may have some dead time on their hands. Much of this will be turned to maintenance and repair jobs and improvements that have had to be delayed in favor of more immediately pressing tasks. But this





Dividing annual sales of gas househeating equipment shows how sales accelerate throughout the summer. (Source: GAMA)



While this year's sales are not expected to quite reach the level of "fabulous '55," they should exceed all other records.

summer activity should never become simply "makework."

A very poor alternative is to lay off unneeded help in the summer. If you've been forced to do this, you are well aware of its drawbacks. How much better to put these people to work building new loads for you!

Another reason why a slack time is a good time to sell househeating is that it is probably going to require more time and effort spent in the field than will other types of selling. A heating job should be tailored to the house itself, so somewhere in the selling process your representative is going to have to get into the customer's home. This is more time consuming than selling off the display floor.

Still another reason for concentrating on househeating now is that you can make special offers on adjustment and servicing of equipment while it is out of operation. Some of the most successful dealers have tied their campaigns to this sort of servicing activity; the results speak for themselves.

If you're in an area where winter peaks are severe, your customers are liable to be faced with frightening fuel bills for the three or four coldest months of the year. Many dealers have found budget billing the best palliative for this winter headache. But you can't very well institute it when winter is already here. Best to set it up in the late summer and let your customers build up some credits before the icy winds start to blow.

If you'll pardon a pun, househeating today is one of your "hottest" items. GAMA statistics show that the sales totals for warm air furnaces, conversion burners, and boilers in 1958 were well ahead of any year in history except the peak year, 1955. Floor furnaces and wall furnaces showed good gains over both 1956 and 1957—something that cannot be said about many household appliances.

In 1959, manufacturers are expecting warm air furnace sales to go up another 5.5 per cent, boilers to go up 5.1 per cent, and vented recessed wall heaters to increase 7.1 per cent. Only floor furnaces and conversion burners are expected to show a loss.

Heating equipment sales can mean a lot to you in terms of increased uses of gas for other domestic appliances. Oil heating and electric kitchens go hand in hand, but gas heating usually indicates an all-gas house. Why shouldn't the furnace be the first gas appliance to go into the house? If rates are right, it's one of the easiest to sell. The record shows that the demand is there.

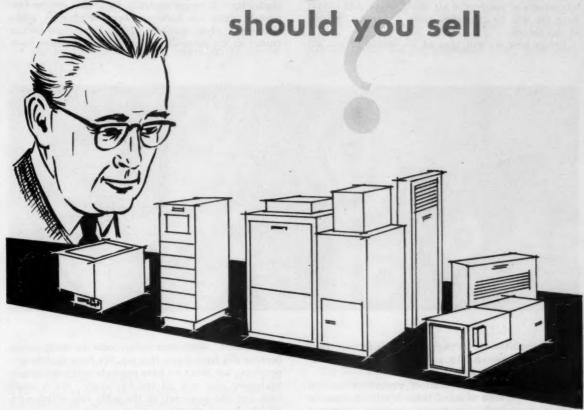
And it's a lead! The average 5- to 6-room house requires .25 gal. of LPG per degree day. If you're in a 4000-degree-day-per-year area, the annual fuel load would be 1000 gal. Smaller houses, well constructed with good insulation, would use about .2 gal per degree day. Larger houses may go as high as .3 or even .35, if poorly constructed.

And it's being sold. A cross-section of dealers surveyed by BPN earlier this year estimated that sales of all types of heating equipment would increase by anywhere from 10 to 68 per cent. It's time to get on the bandwagon.

It's time to sell househeating.

0

What type of heating should you sell



HAT type of househeating should you sell?

The question is purely rhetorical. A dealer has a wide variety of heating systems from which to choose. Gas being the most flexible fuel for heating, there are as many possibilities as there are varying sizes of pocketbooks, varying sizes of heating jobs, and varying tastes.

The competition from other fuels is either dead or dying. Coal is no longer king, even with a small "k." Oil is staging a desperate fight, at times so desperate that it degenerates into an out-and-out smear campaign. Oil lacks the flexibility of gas; its uses are much more limited. The only comer among the competitors is electricity, and fortunately it still has a long way to go.

During the past few years it has been gas that has made the real strides, not only in sales but in new and improved products. For a time there was a big splurge in conversion burners, which has since dwindled as the market has become steadily more saturated. In many areas today, there is precious

little to convert. Concurrently, there was a rise in the popularity of central forced warm air systems; this has continued unabated.

Space heaters, the real bread and butter for most LPG dealers, have been improved and beautified and new lines have been introduced. Wall heaters, a relative newcomer, have captured a large share of the market. Floor furnaces, a proved performer, have continued to be popular.

Hot water systems, having graduated from the days of the unsightly radiator, have been making a strong comeback. Forced warm air circulators have enjoyed a vogue. And now we have a promising upstart in the field—the "ventless" type of heater, which has a sealed combustion unit taking air for combustion from outside the house and throwing the products of combustion right back out again through concentric pipes running through the outside wall.

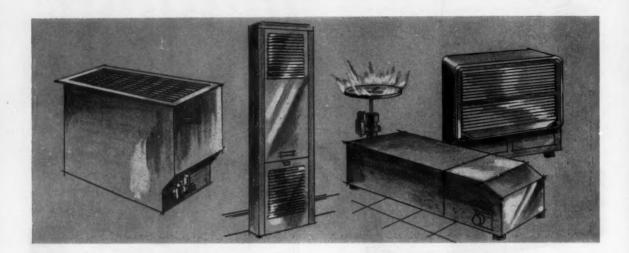
"A quick rundown on the various types of heating . . ."

The day of air conditioning is here, and dealers who have not already done so should immediately begin giving serious thought to its possibilities. A line of window air conditioners will give the dealer something else to sell, rounding out his comfort line. It will also serve to introduce his customers to the advantages of year-round air conditioning, and should pave the way to upgrading them to central systems in the future.

Before long we will have an abundance of gas all-

control. Are you selling thermostatic control with each installation? If you are, you know that several individually governed space heaters can sometimes do a job that's superior to a central system in the same installation.

Has the bathroom heating job gone by default to electricity? A single centrally controlled system frequently omits the bathroom because of high peaks that occur when members of the family are taking baths; so it's generally regarded as a separate heat-



year air conditioners on the market. Meantime, there is every good reason why a dealer should begin conditioning his customers to comfort.

With all the types of comfort equipment now on the market, or soon to come, there is still an amazing lack of resourcefulness among heating equipment salesmen in tailoring the sale to the needs of the home. Too often a central forced air furnace for a home is engineered from a pattern that has been used for years. A home that cannot be adapted to central heating is equipped with a space heater or two with no real study as to how well suited the equipment is to do the job.

For example, do you realize that you can do a fine job of zone heat control with several different types and arrangements of equipment? With a central forced air furnace, multiple thermostats plus properly engineered dampers and duct work can put flexibility into an otherwise inflexible system. The nursery, for example, can be kept warmer than the rest of the house. Two-story and split-level homes can be comfort-conditioned to eliminate cold lower floors and hot, stuffy upstairs rooms.

Or, you can do a similar job with two furnaces instead of one—and, according to the proponents of this method, you can sometimes do it more cheaply.

Space heaters are even more of a natural for zone

ing problem. With restrictive codes in many areas barring gas from doing this job, it's been electricity's province; but today we have separate bathroom heater equipment that will fill the bill nicely. It's a small load, but one more nail in the coffin into which we'd all like to put electric heating.

Let's do a quick run-down on the principal types of heating to see what a vast array of systems is available to the dealers,

Gravity warm air: This equipment depends for circulation upon the difference in weight between the heated air leaving the top of the casing and the cooled air entering the bottom. The heater is placed in the basement and warmed air, taken from the top, is distributed through sheet metal ducts. Registers are usually located at or near the baseboard. Cold air is usually supplied from within the house.

Because the gravity head is usually quite low, the furnace must have relatively low internal resistance to the flow of air.

The engineering job with gravity warm air furnaces is quite exacting, and the physical requirements of the system make this method difficult to apply.

Forced warm air: In recent years, this has been the most popular of the central systems. Centrifugal fans

or blowers, motor-driven, provide the air circulation. Not only does this help achieve heating balance, but where fan controls so provide, it is possible to get air circulation with the heater off, which provides some degree of summer comfort.

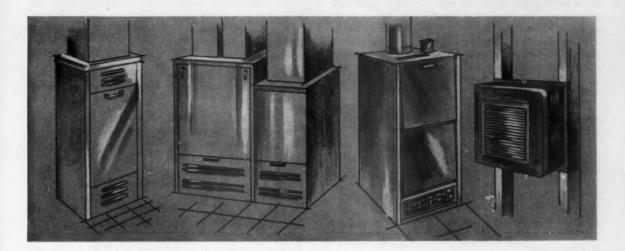
In considering this type of system, remember that it has these advantages:

- The furnace can be placed anywhere (an important consideration with basementless houses) in a closet, in the attic, or even under the floor.
- Distribution ducts can be small and therefore easily concealed.
 - · Circulated air may be cleaned with filters.
 - The location of supply and return grilles can be

board, and flush wall convectors, plus light-weight, highly efficient boilers lower the costs and simplify the installation job.

They argue, further, that hot water heating systems are easier to design, lay out, and install than warm air systems; and that LPG dealers who are not qualified to do sheet metal work can without difficulty do the entire job with a hot water system.

Don't, by all means, downgrade warm air systems. They have many advantages, and in a number of areas they have top acceptance in the heating field. However, if you are not equipped to install the duct work and cannot work out a satisfactory arrangement with a sheet metal shop to handle the work for you, give hot water heating systems a close, hard look.



varied to assure the utmost in comfort.

- · Continuous air circulation is possible.
- With proper design of fans and ducts, it is possible to add on units to give complete cooling and dehumidification in the summer, using either ice, mechanical refrigeration, or low temperature water for cooling and de-humidifying.

Hot water heating systems: These employ water to convey heat, flowing through pipes connecting a boiler or water heater with radiators or convectors. There are two general types: the gravity system, in which water flows by thermosiphon action, and the forced system, in which a pump maintains the flow of water.

Hot water is also frequently employed in panel heating, which has had good acceptance in recent years.

Manufacturers of hot water systems are now trying to popularize the term "hydronics" as the correct word for heating with water. They point to recent sales figures in arguing that the method has enjoyed a rebirth since new techniques have been developed to employ it. It was expensive, and couldn't compete with forced air furnaces. But, they say, this has changed. New radiation methods, using copper tubing, aluminum fin baseboard convectors, cast iron base-

They may be a way to get a market you haven't been able to touch.

The simplest method of piping a hot water system is the "series loop," a single loop from the boiler through the system and back again. For larger homes, a "split loop" is recommended to get faster heat response. Each circuit is balanced with a balancing valve in the return line.

When you split a system, zone control can be easily adapted with separate thermostats.

No-vent heaters: This relative newcomer is beginning to make a real dent in the market. It's easy to install, since you need only punch a hole through an outside wall and hang the heater over the hole. In those areas where restrictive codes forbid the use of heaters which take make-up air out of the room, the no-vent heater passes the test. It takes air for combustion from outside and passes off products of combustion through a concentric vent line.

Manufacturers estimate the cost of the wall cut at about \$15. They claim you can steer clear of union jurisdictional disputes when you're installing this appliance. They also claim up to 84 per cent heating efficiency.

The no-vent is well adapted to zone control. Three or four, strategically placed in a small home, can do

"Know your heating equipment and know it well. Be an expert."

an excellent localized job. First costs are low, and by heating selectively the homeowner can materially reduce his gas bills.

Warm air floor furnaces: Throughout much of the United States, this type of system is the backbone of the heating business. Floor furnaces are extremely flexible. In milder climates, a compact house can frequently be satisfactorily heated with one dual floor furnace. In fact, heating engineers refer to these as "central heating systems." They are adaptable to zone control; can be used as auxiliary units, and can be installed fairly easily in existing homes.

Floor furnaces provide excellent air circulation. One of their strong points—at least for single-register models—is that they do not take up valuable wall space. They can be installed in carpeted rooms as easily as on bare floors.

Since the heating element, gas piping, and flue vent are all suspended beneath the floor, the installation job is inexpensive.

A modest depth of crawl space will accommodate floor furnaces, so they are excellent for basementless homes.

Recessed wall heaters: The last decade has seen a great many recessed wall heaters installed in both new and existing homes. These have become, in fact, one of the most popular forms of heating equipment in recent years.

Wall heaters have good flexibility, since they come in a variety of input sizes and can be used to heat more than one room. They come in both gravity and forced air models, and have stub ducts conduct air to two or more rooms. A single unit, centrally located, can do an efficient job of heating a small house or a new wing of an existing house.

Whereas no-vent-type heaters must be placed in outside walls, recessed wall heaters are appropriately installed in interior walls, giving them greater area coverage.

Space heaters: In the last few years, there have been great strides in the development of the old reliable space heater. There are now many types and models to choose from, and each is a handsome piece of furniture, Most installations today are automatically controlled, and for localized heating jobs they are highly efficient. Properly placed and where circulation between rooms is good, they can supply heat to several rooms.

Most space heaters are semi-portable, a characteristic which is advantageous for changing heating requirements and for relocating furniture.

Space heaters are generally broken down into four or five classifications:

Circulators: These are small warm air furnaces

that heat the room mainly by convection. Some have radiants over the burner with windows in the front to permit some radiation of heat as well. These may be either vented or unvented.

Radiant heaters: This type of heater is generally unvented. A refractory placed directly above the burners heats to incandescence, enabling the heater to give off 30 per cent or more of its heat in the form of radiant energy.

Gas-fired steam or hot water radiators: These are self-contained copies of the centrally supplied radiator. The gas input to this type of unit is controlled by steam pressure or water temperature within the radiator itself.

Warm air radiators: While giving the appearance of a steam radiator, these are simply vented or unvented circulators.

(Wall heaters are also sometimes classified as space heaters, since they take the air for combustion from the space being heated.)

Conversion burners: In spite of the good market saturation, there are still plenty of jobs left where conversion burners can be installed and the load swiped from a "competitive" fuel. Some jobs you probably wouldn't be able to get any other way. Conversion burners are available for a wide range of furnace models and areas ranging from 50,000- to 400,000-Btu-per-hour capacity. Atmospheric conversion burners have clay or metal baffles to direct the products of combustion toward the side walls of the combustion chamber, or—in single port burners—the flame impinges against a horizontal cast iron, stainless steel, or ceramic distributor plate which directs the products of combustion toward the side walls.

It's not economically feasible, of course, for one dealer to carry all the many lines, shapes, sizes and variations of heating equipment. But bear this in mind: with gas heating, you have more types and variations of equipment than with any other appliance. You can meet the needs of any customer, no matter what his heating problem may be. Investigate all types; find out from your suppliers the strong and the weak points of each for a given installation. Be an expert on heating. Conscientiously do the best job you can in fitting the heating equipment to the customer's needs. A good heating job will win a friend for gas; a poor heating job leaves you wide open to competitive fuels-including electricity. A good-heating installation is an "in" by which you can sell other domestic uses in the home; a poor heating job is an exit for gas in any form.

So, know your heating equipment, and know it well. Be an expert.



OUT FRONT with every feature that counts! Check all that's new! Compare all that's standard! You'll buy! You'll sell—and how! For, each magnificent new Temco model reflects styling and engineering advances that definitely out-look, out-rank, out-perform all others! Your customers have more to say. More to sell! Don't miss a mention of these important new Citation features:

- * Smart! Low-silhouette styling!
- Beautiful! Two-tone decorator colors!
 Streamlined! Heat Cham-
- * Streamlined! Heat Chamber for quiet operation!
- New! Ceramiclad Radiant-Black Surface Steel Heat Exchanger!
- Durable! High-temperature Silicone ename! finish!
- * Easy Lighting! Out Front Control Center!
- * Powerfull 200 CFM Blower Attachment, optional

Hurry! June is last month for FREE "Dealer Dollars"!

Stock the line! Stack the dollars! Get free "Dealer Dollars" on any gas heating unit you order from the complete Temco line during the first six months of 1959! "Dealer Dollars" look like cash... and they spend like cash! Each is worth an actual one-dollar cash value on any Temco purchase you

make during the last six months of 1959! You earn "Dealer Dollars" the first six months... you spend 'em the last six months! Contact your Temco distributor for full details on "Dealer Dollars" and how they help you buy and save on the "selling-est" line for '59!

A full line with FREE "Dealer Dollars" on every unit!



ONCE you've made up your mind to stage a heating promotion this summer, and have decided what types of heating equipment you're going to promote, your next job is to set up an overall plan for the promotion.

Decide what you want to accomplish and set up goals for yourself. You will probably be able to channel your selling efforts into three general categories:

- Selling gas heating equipment to your present LPG customers who have other forms of heating.
- Selling gas heating equipment to people who are not present customers and who do not have gas heating.
- Selling better gas heating equipment to people who now heat with gas, but have systems in need of being "upgraded."

Upgrading is your real key to success. Unless you're selling to people who are building a new home, every one of your customers has some type of househeating equipment. If that equipment is in genuine need of upgrading, you have but to convince your customers of this need and of gas heating's ability to fill that need and your sale is made! You can upgrade their systems in three ways by selling them equipment that is: more adequate for the job,

are going to be lowest to keep overhead low.

You should have records of all your customers' equipment, if you haven't, immediately start your drivers and other contact personnel on a campaign to get this information for you. Check over your older house heating jobs to determine if they are old enough to be replaced, augmented, or modernized. Your records might also show what automatic equipment is installed and approximately how large your customers' houses are.

Check over your records to determine what a substantial increase in your househeating load would do to your business. What is your ratio of cylinder to bulk customers? What are your tank inventory and supply and delivery requirements? How large are your average drops? How would the drops increase with new gas heating customers and enlarged gas heating systems? What delivery savings could you make?

Once these facts have been established, decide how much you can afford to reduce the price of LPG to househeating customers. You may already have a reduced rate schedule for such customers. See if you can't go a step further—render a free service, give a free tank of gas, etc.—and still come out ahead because new househeating sales will mean more volume and therefore more economies.

Planning your campaign

more automatic, or uses a better fuel. You cannot overstress the better fuel aspect. Your customers must associate gas heating with quality, for of course, it is the quality fuel. This puts much of the present day society to work for you, as the "move up to quality" theme permeates today's economy, selling everything from luxury cars to premium grade beers. Therefore plan to: convert other fuels to gas, convert undersized systems to properly-sized systems, convert non-automatic systems to automatic operation.

In order to plan a promotion, you must first fully understand exactly what it is. A promotion may be defined as a concentrated, intensified advertising and selling campaign carried on for a limited time in an effort to create public interest in your product and attract attention (and customers) to your place of business. It should greatly increase traffic in your store, acquaint many people with the merchandise you have to offer, provide a long list of prospects, produce a shorter list of hot leads, leave a favorable climate for further heating promotion, and establish you as a progressive businessman, a real asset to the community.

Start planning by surveying your territory. Get a map and use pins to locate areas where your househeating saturation is low. Concentrate your greatest efforts on those areas where your delivery costs These facts—increased sales, increased drops per mile, increased volume per drop, increased gross profits due to new installations, etc., will help in arriving at your budget for the campaign.

Set up this budget immediately. You may and should have a general advertising and promotion budget already set up—probably 2, 3, 4, or more per cent of your gross sales. You should also have a cushion in your budget—a sort of slush fund that can be used for just such special needs as this—perhaps not for advertising and promotion, but to give your place a little extra fixing up.

If your heating promotion lasts three months, it should cost about one-fourth of your total advertising budget for the year. However, you are working in the future, not in the past, so your budget should be based on figures for the current year, including what you will sell during the heating promotion. The promotion will increase your anticipated gross and that increase should be figured in your budget for the promotion.

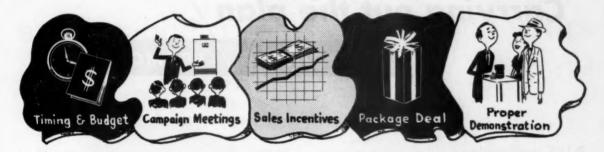
To give a specific example, let us suppose that your anticipated gross sales are \$200,000 for this year and you have been planning to spend 3 per cent of that amount, or \$6000, for advertising and promotion. Your three-months budget would be three-twelfths or one fourth of that—\$1500. Now if the promotion boosts your previously anticipated

sales 20 per cent, or \$40,000, you should also figure to spend 3 per cent of that, or another \$1200 for the promotion. Thus, your promotion budget would be \$2700 not \$1500.

Once you've decided to stage a heating promotion and worked up your enthusiasm to the point of setting up a budget, you've got to start thinking about transmitting that enthusiasm to your employees. Bring them into the act as soon as possible. Have a brain storming session or a coffee klatch on company time. Their ideas may prove much more valuable than their time off from their actual jobs. First, however, figure out how you will repay them for their "above and beyond the call of duty" helpbonuses for sales leads, etc. Even if they come up with no great immediate useable ideas, having a chance to speak will give them the feeling of participation, and may result in their working harder on the promotion itself. It may also stimulate their imagination so that they will come up with useable ideas after the session.

Then, mull over the sum total of your ideas and their's. You probably will have a lot more ideas and suggestions than you can possibly use. That is the time for evaluation—weeding out the too expenHow many mailings? What sort of follow-up?

- Canvassing Door-to-door? Telephone? Use phone girls? Use special salesmen? Use drivers?
- Giveaways—Probable costs? Where to get? How to give away? How to get most benefit?
- Contests—For salesmen? For drivers? For office employees? Costs? Conditions?
- Price Specials—Save through volume purchases?
 How much can you cut price and still profit?
 Probable load profit increase to reimburse profit lost on appliance?
- Editorial Help—Will your promotion be news? What can you do to create news? For papers? For radios? For local television?
- Assistance From manufacturers? From suppliers? From cooperating businesses? From customers? What help is available? Co-op ads? Mats? Literature? Mailing pieces? Tie-in advertising? Displays? Selling aids? Testimonials?



sive and probably less effective ideas. Unify the best ones into an integrated campaign, a promotion that hammers away at the same subject from different angles, yet maintains enough similarity in the various approaches to build up a cumulative effect.

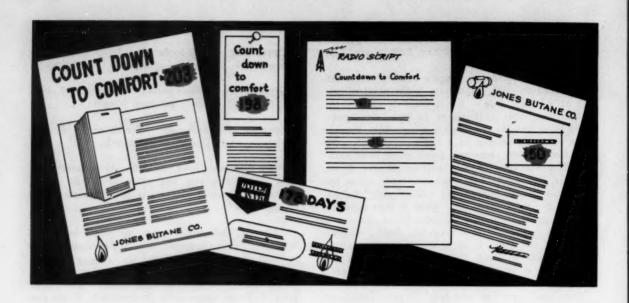
You'll need a unifying theme—such as the "Count-down to Comfort" idea suggested in the advertising and promotion story in this special section. Put your imagination to work to get a theme. It might be something as simple as a free tank of gas or a free \$15 checkup of prospects' heating systems. It should be the one thing that makes all components of your promotion fit a pattern.

Once the idea really begins to jell in your mind, outline your plan of attack. Use the check list below to help you make sure you've included everything that should go into your promotion.

• Advertising—Theme? Budget? Who will handle? Timing? Media: Newspapers? Radio? Direct mail? If newspapers, how many insertions? How big? How often? What type ad? One or more papers? If radio, which station or stations? How often? What time of day? How long a commercial? If direct mail, what types of pieces to use?

- Customer services Surveys? Inspections? Terms? Procedures? Costs? Training and materials needed?
- Displays—Time for clean-up, paint-up, fix-up campaign? Need new platforms? New screens? Do displays pull customers through store? What type display is best for your customers? Cost? Where to get them?
- Demonstrations—Salesmen need training? Selling aids? Leave behind pieces? Floor plan layout materials? Working or knockdown models? Catalogs? Ammunition against other fuels?
- Credit plans—Which financing institution? What terms? Who supplies contracts? Tie-in with monthly bill? How to best present?

You may have thought of other items you will want to add to this check list. You probably will think of even more after you read the following detailed articles on various aspects of heating promotion. These, then, will be the skeleton for your plan. Good luck!



Carrying out the plan ADVERTISING PROMOTION

NOW that you've planned your campaign, you've got to let the public know about it through advertising and publicity. Advertising is one of the most mysterious, highly refined skills (there are many who call it an art) in our complex modern society.

There is no reason, however, why the businessman who needs to advertise should shy away from using this most necessary of merchandising tools. The basics of advertising are simple enough for even the most casually interested to quickly understand. With that much clearly in mind, you can, if you wish, leave the rest to the experts who are available to serve you.

You should analyze your situation and decide what to do to best tell your story; for that is the function of advertising: paying someone else to tell your story because they can do it more cheaply and effectively than you can.

In surveying your situation, the chances are you'll find a total of three possible ways to tell your story: in the newspapers, on the radio, or by direct mail to your customers and potential customers. No two local areas are exactly alike. In some cases, the local papers are more highly thought of, more popular, more effective. In others, it's the local radio station. Sometimes, the people you want to reach can

be most effectively and economically contacted by mailing sales letters and literature.

In any case, the decision as to where and how your story should be told is up to you—unless you hire an expert and advertising agency. This need not be as far-fetched as it sounds, even if you're a fairly small company, for their expert service can be inexpensive, may even be free! Most agencies receive all or nearly all of their compensation from the newspapers, magazines, radio stations, and other advertising media which carry their client's advertising. They get a standard 15 per cent discount from the various advertising media because they prepare the ad, thus saving time and money for the paper, magazine or other medium.

While you may thus use the services of an advertising specialist without the expense of a specialist's fees, the volume of your advertsing may be too small for an agency to profit on a 15 per cent basis. In that case, you and the agency can work out a retainer fee or hourly rate arrangement.

A majority of the nation's smaller advertisers depend upon the free services of the media in which they advertise. Almost any newspaper will have someone capable of professionally laying out and writing an ad, and any successful radio station should have someone capable of writing a commer-

Warm Morning Gas Heaters! These beautiful, feature-packed gas heaters again led the industry in sales gains with a 34% increase over 1957. New Top.0.Matic Controls will rocket Warm Morning Sales to a new high in 1959. Easier sales, bigger profits can be yours with AMERICA'S fastest selling gas heaters!







Send postcard today for full color catalog, prices and information about co-op advertising, broadside mailing program, and other powerful advertising support backing WARM MORNING gas heater dealers.

LOCKE STOVE COMPANY

114 F. West 11th Street

Kansas City 5, Missouri

MANUFACTURER OF WARM MORNING HEATERS AND INCINERATORS AND MOORE'S GAS HEATERS



cial. This service costs you nothing because they are paid the full price for the ad, since they do not have to allow an agency commission.

One great advantage of using an agency's services, is that you can get a professional appraisal of your advertising situation and a studied recommendation as to where you should tell your story and how.

Once these preliminary decisions are out of the way, you get down to the specifics.

If you did not determine your advertising budget when you mapped out your heating campaign, do so as soon as you have determined where you are going to tell your advertising story. Newspaper ads begin at \$2-3 (1 column wide, 1 in. high, in small weekly) and radio commercials may be as low as \$5.

Find out how much the advertising rates are in the media which interest you. Also find out if the manufacturers of the products you handle are willing to run co-op ads, sharing the cost. If you sell appliances but do not install them, the firm that handles your installation business may be willing to split costs. If the manufacturer or the installer happens to be running an advertising campaign of his own, "tie-in" ads mean increased benefits to all.

Advertising money well spent is a good investment. Spend as much as you can. If your budget must be limited, don't get discouraged. In advertising, as in so many other things, the simplest way is frequently the most effective. A limited budget may mean cutting out one or two things you had planned, but it should not mean doing an inadequate job on what you decide to do. For example, a less fancy ad with fewer illustrations and less artwork than originally planned may actually prove more effective. Illustration costs may be saved by using existing artwork (such as letterheads) or mats supplied by appliance manufacturers. You may even use entire ads as prepared by the manufacturer.

Remember that a good advertising program must have continuity. Repetition is essential, so your final decision on media must be made on the basis of which one or ones you can afford for a concerted campaign.

The significance of the word "campaign" is that it indicates a connected series of operations intended to

accomplish a certain objective. Thus, the ads should relate to each other, providing a cumulative effect in the prospect's mind. Decide what you are going to emphasize: better service, superior products, special prices, a no-obligation heating survey, or giveaways, such as a free tank of gas or a free thermostat. Confine your emphasis to one or two things and give all ads a somewhat similar treatment, but provide changes of pace. Advertise in a regular pattern, often enough to build up an impression, but not so frequent as to constitute a waste (once a week, for example, is often enough for a newspaper campaign extended over two or three months, as a heating promotion should be).

A few basic thoughts on each of the three different types of advertising media you are apt to use may prove helpful, but the mechanics are best left to the professionals, in the agencies, on the newspapers, at the radio stations, and in the direct mail houses.

Newspaper advertising is display advertising. You "display" a certain number of items in an arrangement calculated to: (1) Catch the reader's eye, (2) Associate the ad with the advertiser, (3) Induce the reader to read the message. Over the years, experts have found that simple ads with large illustrations and a small amount of easily-read copy (short sentences) are most effective. Abstract terms confuse, so something concrete should be played up. The reader should be involved, picturing himself taking positive action suggested in the ad: getting something for nothing, seeing something, doing something.

Radio advertising, is "plain talk." It should be thought of as talking directly to a customer, telling your story to him in the simplest terms, since you can't repeat and he can't ask questions. Sentences should be very short.

Direct mail advertising offers the opportunity to employ an almost infinite variety of material in nearly endless number of ways. You may use: letters, post cards, stuffers accompanying statements, self-mailers not requiring envelopes, booklets, business reply cards, gadgets or any combination of these. One mailing will not do the complete job, so more than one type of mailing piece should be used. A simple campaign can be relatively inexpensive but effective if it is built around offset-printed (in typewriter type) letters or bulletins inexpensively reproduced on your letterhead, always including one or two pieces of colorful sales literature provided by manufacturers. If a customer reply is wanted (to a heating survey offer, for example) a return post card or a stamp should be enclosed. If the budget will allow, a gadget purchased from a novelty company makes a memory-provoking enclosure. Since these pieces represent you to the prospect, they should be first rate productions done by professionals, unless you can do a truly professional job. Here again, simplicity is the watchword. The prospect can be confused by many pieces of literature so only one or two messages should be made in one mailing.

One of the most effective ways to make a few advertising dollars go a long way is a series of "teaser ads," repeating mysterious messages to build up in-



Get on the "sealed" gas heater band wagon with **SAFTI-VENT**

Safti-Vent, the hottest profit brand in the already hot market for sealed gas heaters, offers you a "package" that will build your profits almost automatically, and we mean exactly that!

Safti-Vent will prove this statement! Proof through experience! Safti-Vent, and only Safti-Vent, has a proved profit record of 7 years of phenomenal growth!

If your Safti-Vent distributor has not yet brought you this proof of profit, you contact him!

Let him prove, to your complete satisfaction, that you can't miss with Safti-Vent because:

1. Each of the 8 units in Safti-Vent's complete line is packed with superior and exclusive features that lift Safti-Vent above all competition.

2. Your markets for Safti-Vent are as broad as the need for comfortable heat. He'll show you at least 39 types of Safti-Vent buyer prospects. Everybody is a prospect!

3. The Safti-Vent sales package is a planned program that tells you exactly what to do and gives you the "tools" to do it.

4. Safti-Vent dealers are backed with a terrific advertising program, reaching millions—yes, millions—of prospects, both householders and commercial buyers.

5. And you'll never lose a Safti-Vent sale because of price. Safti-Vent is strictly competitive and offers the best value on the market.

Let's get started on this profit program! Now! Mail the coupon today!



	BURNER CO., INC. d Ave., San Rafael, Calif.
Let's have p	oof of the profit with Safti-Vent.
COMPANY	
YOUR NAM	IE
ADDRESS	



terest, then revealing all with a big splash. Perhaps the most famous teaser campaign of all time was Lucky Strike's "L.S./M.F.T." but there have been thousands of smaller teaser campaigns which were just as successful.

With this in mind, BPN devised a teaser campaign that can be used by an LPG dealer with a minimum of fuss, bother and money. Let's say you'd like to launch your heating campaign with a bang on July 1, and want to start telling the people about it a month in advance. On June 1, you place a small, but conspicuously-located ad in your local newspaper. The entire ad consists only of a number "203" in large figures. Depending on your budget, you run a similar ad the following day or the day after that using either "202" or "201." Repeat this process as often as you can afford, always decreasing the figure by one for each day that has passed. If your budget will allow, you might begin a series of 15 second spot announcements on radio, the entire announcement to consist of the appropriate number, preceded and followed by a few seconds of silence. Then, on June 15th, you add three words to the ads and commercials, which on that day would read: "Countdown to Comfort: 189!"

By this time, your campaign should have thoroughly aroused the curiosity and interest of your community. On June 25, you reveal what the mysterious numbers mean.

The revealing radio commercial might read: "Countdown to Comfort: 178! Yes, folks, there are only 178 days left until the beginning of winter! It may be a little early to start thinking about Christmas shopping, but it certainly is time you did think about how comfortable your home will be next winter. The 178 days left to December 21, the official beginning of winter, sounds like a long time. But you know how quickly the days roll by. You'll need the comfort of an adequate heating system long before December 21! Is your heating system adequate? Do you have cold areas in your house? Isn't it time your heating equipment was checked? On Wednesday, July 1, Jones LPG Co. inaugurates its 1959 'Now Is the Time to Buy House Heating Jamboree.' Owner Bill Jones, a heating expert, invites you to bring your heating problems to him. Bill will be happy to come out to your house and make a free survey of your heating system. And to the first 500 homeowners who stop by to see the latest in heating equipment, Bill will give a free box of 21 delux Christmas cards. No obligation, of course. That's the Jones LPG Co. at 123 Main St., and the date is July 1. Remember, there are only 178 days left to the official beginning of winter and there will be a lot of cold days before then!"

A large ad bearing a similar message would be placed in the local paper on the same day. During the following days, you hammer away in newspapers and on radio as frequently as your budget will allow, but your biggest advertising splash is on June 31.

Because the entire campaign is built around numbers, you need spend no money for artwork or printing cuts. You can, however, make generous use of the free stock cuts and type decorations printers usually use at Christmas. You can carry this theme into your store decorations, give away Christmas ornaments, etc., to get people thinking about winter problems in the middle of summer.

As your sales campaign continues, run ads on an approximate weekly basis, hitting the "Countdown to Comfort" theme and playing-up the number of days left until winter. For your convenience, BPN has compiled a Countdown to Comfort calendar which runs from June 1 to October 31. The large numbers indicate the day of the month, the smaller ones, the days left until the official beginning of winter.

You'll want to try to get some publicity in your local newspaper. From your standpoint, publicity is free advertising. Will the newspaper give you free space? Yes, if it happens to be for real news, or for a story of real interest to readers. In such cases, the editor will be happy to give you the space, providing much or all (the amount depends on the individual newspaper) of the work is done by you. This may mean simply arranging everything for a reporter and photographer to cover the story or it may mean giving the paper the complete facts and selective photos.

Spend some time thinking about what might be your best story—from the reader's standpoint. It might be that: you're giving away over 10,000 Christmas cards in the middle of summer; you're giving away Christmas ornaments to all men, women and children; you've just received the largest shipment of heating equipment ever to arrive in your town; you installed a free clock thermostat in the home of a needy invalid; you've landed the heating contract for a local church or hospital; or you've instituted a so-many-days-to-winter advertising campaign. Or, it might be something else that you've planned.

You might also assume the role of local heating authority, passing on information obtained from your manufacturers, the LP-Gas Council, 185 N. Wabash Ave., Chicago 1; Gas Appliance Manufacturers Association, 60 E. 42nd St., New York 17; and the American Gas Association, 1032 E. 62nd St., Cleveland 3.

Once you've decided on the story, sound out your local editor. Ask him if he would be interested in

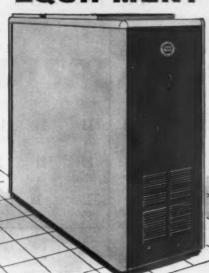
YOU SELL MORE BECAUSE.. YOU HAVE MORE TO SELL

WITH THE JOHN WOOD FULL LINE



HEATING

EQUIPMENT



John Wood helps you expand your business by selling the complete heating package — both house heating and water heating. You can supply the right furnace and water heater combination for every home heating need. You get the big economies of one source buying backed by John Wood's nationally-known reputation for quality.



JOHN WOOD COMPANY

Heater and Tank Division

Conshohocken, Pennsylvania · Chicago, Illinois



Countdown to Comfort Calendar



	August					
						1
2	3	4	5	6	7	8
141	140	139	138	137	136	135
9	10	11	12	13	14	15 128
16 127	17	18 125	19	20 123	21 122	22
23	24	25	26	27	28	29
30	31					

			June			
	203	202	201	200	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19 185	20 184
21 183	22 182	23	24	25 179	26 178	27
28 176	29 175	30	*			

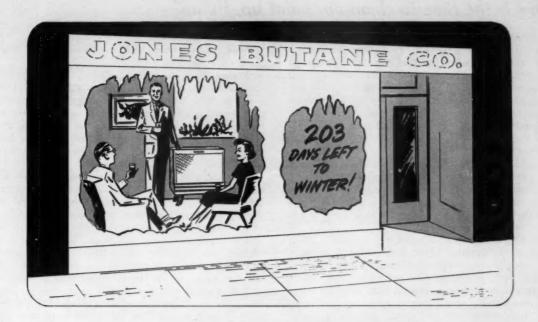
		Se	ptemb	er		
		1	110	109	108	5
6	105	8	9	102	11	12
13 99	14 98	15 97	16 96	17 95	18 94	19 93
20 92	21	22 90	23 89	24 88	25 87	26
27 85	28 84	29 83	30 82			

			July			
			173	172	3	170
5	6	7	8	9	10	11
12 162	13	14	15	16	17	18
19	20 154	21 153	22 152	23	24 150	25
26 148	27 147	28	29 145	30	31 143	

00	01	03	02			
		0	ctobe	r		
				81	2	3 79
4 78	5	6 76	7 75	8 74	9 73	10 72
11 71	12 70	13	14 69	15 67	16	17 65
18 64	19 63	20 62	21	22 60	23 59	24 58
25 57	26 56	27 55	28 54	29 53	30 52	31

such a story. Build it up within reason, but don't tell him it would be a good story (he prefers to judge for himself) and don't tell him he should run it because you are advertising in the paper (he just may strongly resent that and decide not to run any-

thing). The chances are that you'll come up with a good story to help tell the public about your campaign, your series of connected operations intended to accomplish your objective, and greater heating sales in the coming months!



How to DISPLAY

-effectively

THE job of advertising and publicity is to get people to your store. Once they're there, it's up to display to bring them in—to circulate them through your place to see your entire line, to create such a favorable attitude in your customer's mind by appealing to him through his eyes, hands, and heart that your selling job is made much easier.

The word "display" comes from the Latin "displicare" which means "to unfold." That is exactly what your heating display should do for you: unfold your sales story.

An effective display is especially needed when selling heating, which is a taken-for-granted, usually unseen commodity. The average homeowner forgets about his heating plant until something goes wrong with it. He overlooks modernizing it, but makes many less important home improvements—on portions of the home constantly before his eyes. You must, therefore, make him really heating-conscious. You must impress him with the idea that heating equipment is much more important than the items he would rather buy—a new car, a new television set, a new hi-fi unit, etc.

An effective display is not merely a piece of merchandise set on a platform. It is the entire atmosphere surrounding that merchandise: the floor, the walls, the ceiling, the office, the store front, the parts and service departments, and yes, it is even you!

Take a good, hard, detached look at your place. What must it look like (be honest with yourself, now) to your potential customer? More often than not, places of business just grow. They are not well planned; and the results frequently look like it. Things just don't seem to match.

For example, do you have an old fashioned exterior and a modern interior? You need not spend thousands of dollars for a major remodeling job. You should spend a few hours to come up with an idea to make the old and the new fit together. The age of an old store front might be pointed up with a simple period-style redecoration and the addition of a few gas lights, that phenomenally fast-selling "new" item. Your customers are thus introduced to gas-using merchandise in your modern interior with the thought that "Gas is as familiar and dependable as yesterday, as clean and modern as tomorrow."

Stimulate your imagination to create a unifying theme for your showroom, a theme that will enable your place to "hit" the customer with the impact of a 40% discount!

To avoid softening this impact, your showroom must be clean, attractive, and uncluttered. Fortunately, all these things can be accomplished with one operation—a clean up, paint-up, fix-up campaign.

"Now is the time to clean up, paint up, fix up"

The chances are good that you may have been planning on just such a project. Early summer being a relatively slack season, the time for such a campaign is NOW. Why not put your employees to work on it immediately if your place is not in first class shape.

Cleaning up your place should be a double-barreled operation, removing not only any accumulated dirt, but also the superfluous things that seem to accumulate. Clean up the storefront, removing extra signs, or other objects that would confuse rather than invite the prospective customer. Clean up the windows, again getting rid of unwanted signs, decals, banners, etc. Clean up the interior, discarding unneeded files, desks, displays, wastebaskets, etc. All this costs virtually nothing, yet may result in a greatly improved appearance.

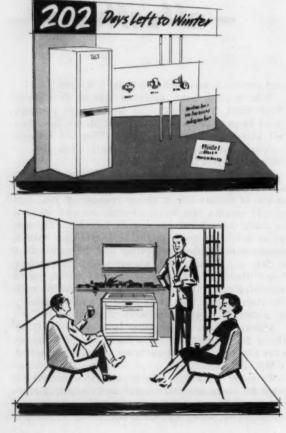
Painting up costs little more, yet can bring about tremendous changes. Select colors that fit in with your overall plan, but by all means think in terms of how great a change you can make. Your walls, ceiling and floor should contrast with (but not fight) your merchandise and displays: surround dark items with light colors, and vice versa. If your ceiling is low, use a light color on it. If it's high, use a dark color and run it part way down the walls. If the showroom is long, use a dark or patterned wall at

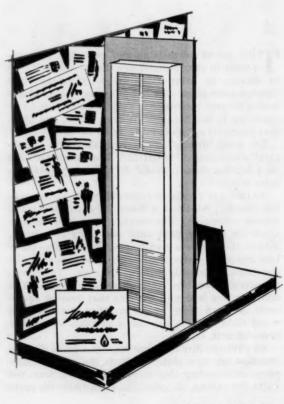
the end. Concentrate on one dominant color with accent colors. Keep walls neutral, saving bright colors for displays.

Fixing up can include almost anything—from building or buying new display platforms to paving your parking lot or planting shrubbery out front. The latter might at first thought seem rather farfetched for a heating promotion, but if they are projects you'd like to do sometime, why not do them when they might do you a little extra good, especially when that's during a slack season?

Perhaps your exterior needs a new sign, or new illumination for the old one or for the entire store front. Show your product in use with several gas lights, in either traditional or contemporary style.

Interior fixing up will probably be limited to new display materials — platforms, panels, screens, drapes, etc. Consider the multi-purpose aspects of such things—for example, if you decide on a room setting, as shown in the accompanying illustration, a 9 ft x 12 ft platform would be easiest to build, but four small platforms, each measuring $4\frac{1}{2}$ ft x 6 ft platforms would be much easier to store and could be used in a variety of combinations. Also in the fix-up category are pegboard, plywood, and wall-board panels and screens. Usually constructed on a





56

THE Dearbarn

REGENCY

THE WORLD'S FINEST GAS AREA HEATER

DEARBORN STOVE COMPANY, DALLAS

REGIONAL OFFICES: DALLAS, ATLANTA, CHICAGO, LOS ANGELES, SAN FRANCISCO

"Arrange your displays to draw customers through the store"

1 in. x 2 in. or 2 in. x 2 in. framework, they may be painted in contrasting colors or "wallpapered" with literature to separate displays and create interest. Drapes often can be made to do the same, often at less expense. New lighting can often do a lot more fixing up than one would imagine, so check yours to make sure it is uniform enough to eliminate shadows and glare, but includes spotlights to pick out the featured items.

The technique of creating effective displays is not discouragingly difficult to master, if you remember

SHOP FILES 10 SALES CLOSING AREA CONTROLS. ANIMATED DISPLAYS

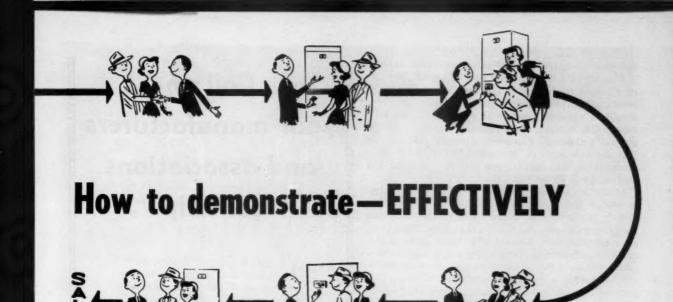
that all elements must draw the customer into and through the showroom, creating such a favorable impression that he would like to buy new heating equipment. Your displays should be varied to avoid boring the customer, but they must fit together to create an overall impact. The unifying factor might be similar design, similar sales messages, or similar colors.

Arrange your displays to invite customers, to make it seem natural for them to walk in. Once they are in, your displays create natural aisles so the customer will walk past all main displays. To increase traffic throughout the store, locate your most popular items, advertised specials, service counter, and office near the rear of the store. Put animated displays and lower priced, higher profit, impulse-purchased items near the front, especially in "spot" displays, on small tables, etc. In the impulse-purchase category are, among other things, the deluxe thermostatic controls which a customer may decide to buy at the last moment, after having already bought a standard control. Group appliances for effective selling, keeping similar items together so they can be easily compared. Large items such as furnaces can stand on the floor, but attract more attention when placed on low (6 in.) platforms. Medium sized merchandise, space heaters, etc., are most effective on knee-high platforms, while smaller objects, like thermostatic controls, should be on waist-high counters. All displays should have neat little stacks of literature and easily-read signs, stating price and performance-"75,000 Btu, ideal for a five-room home."

There are display firms which will do the complete job, or will build individual displays for you. However, you can do the job yourself, using either materials specially purchased from the lumber yard, display wholesaler, and art supply store, or whatever is on hand around your place.

Selling heating in the middle of summer requires more effort than selling air conditioning, but there is no reason why you should not put air conditioning to work to help sell heating. A cool store will not only prove a strong invitation to come in, but will take customers' minds off present weather conditions, putting them in a responsive mood in which they are willing to think about the coming winter. You could enhance the mood with a comfortable living room setting, frosted windows (this incongruity alone will attract much attention), offering hot chocolate, coffee, etc. If air conditioning is out of the question, keep your place as cool as possible, offer cool drinks, etc., to allow them to think about the cooler days ahead.

The accompanying illustrations suggest possible display ideas. Put your imagination to work and you'll soon come up with displays that work for you. It may well be that your heating sales in the coming season will be in direct ratio to the amount of effort you put into your heating display!



THE demonstration is the heart of the sale. A simple showing of an appliance is not enough: the customer should be shown how it's going to make his or her way of life easier and more pleasant.

A demonstration is no better than the salesman who makes it. Manufacturers of heating equipment are fully aware of this fact, and many of them offer trained demonstrators for loan to dealers during househeating campaigns. Call on them for this help; they'll be glad to cooperate. Some manufacturers figure this in the cooperative advertising budget and it's one of the most effective helps they can give you.

Whether or not you use a manufacturer's demonstrator, your own personnel will be called upon to do direct selling, in or out of the store. The most effective demonstrating will be done in the home; almost to a man, the most successful LPG dealers have keyed their campaigns to the home call as the basic medium for selling.

However, you must be prepared for the customer who comes in of his own accord, or who is attracted by your advertising and promotion. Make sure your floor demonstration work is carefully planned.

Every employee should get into the act. This has been the secret of many dealers' success. First, employees will furnish some of your best leads; and they should be encouraged—and compensated—to do this. You may not be able to turn them into top-notch salesmen, but they can be very helpful on the sales floor. How much better, while the regular sales force is occupied, to have a receptionist, bookkeeper, or secretary trained to start the ball rolling than to make the customer wait for a salesman. If she is going to do this effectively, she must know at least the elementary facts about the appliance.

The serviceman who has a pleasant personality and good appearance is in an excellent position to do well on the sales floor. He knows the appliance and the controls. He is also well able to meet the customer's objections, an important quality in good salesmanship.

So, don't overlook any of your employees: train them all.

Give them a briefing on every heating appliance. Explain to them its capacities, general capabilities, and selling points. Show them how it works, how the thermostat operates, how the safety pilot prevents accidents. Explain about cold air returns, circulation of air, and the principles of convection and radiation. Acquaint them with the specifications sheets and give them some simple rules-of-the-thumb on the relationship of Btu inputs to heating capacities in terms of space to be heated. Show them sales literature and explain how to use it. Have at least one sales manual handy for reference purposes.

Impress on them the fact that heating salesmanship is a scientific job, and what they are doing is merely to help open the way to an engineered sale by building up the prospect's interest. Train them to build up the concept of the engineered sale in the mind of the prospect. Encourage them to impress the customer with the importance of having the trained company salesman visit the home.

Every active salesman should have a complete sales manual showing a broad range of equipment lines. Make sure it's neat. Encase the pages in plastic envelopes. Have it catalogued so he can quickly find what he wants. Insert specification sheets, selling pieces, direct mail literature, testimonial letters from customers (a powerful selling aid, so solicit them) and copies of your own and your manufacturers' aids.

Include in the package a "canned" sales talk—a good, basic point-by-point presentation which the salesman can use as a springboard to his presentation. He may not stick to it, but if it's well done and meets all customer objections, it will be an excellent aid to fall back on when the going gets tough. Give him tear sheets of articles from your trade magazines, daily newspapers, shelter magazines, and any other media which extoll the merits of gas heating. Such materials could be just the push needed to get a hesitant

sustamer over his original sales resistance barrier.

Plan the sales "pitch" with your salesman. The day of giving a "drummer" a suitcase full of samples, a pencil, and an order book is gone. Today, sales efforts should be carefully planned in advance. Teach your men to talk in terms of the customer's comfort, of her general well-being. Top-notch salesmen will tell you that the sale must be "romanced." You don't sell a customer on Btu inputs; you sell her on what the appliance will do for her.

Ideally, a good demonstration would include working models of the equipment you are going to sell. Obviously, it's impossible to carry a central furnace into the prospect's home, but there are aids available from your manufacturer. Several offer valve hookups and cutaways which make interesting and useful conversation pieces. A thermostat is a handsome item, and it can be carried into the customer's home. Attractive pictures of heating installations, which should be included in the sales manual, should be shown to her so she can visualize what her own home would look like with comparable equipment.

If you are doing a heating survey, do it right, using a form made out for that purpose (you can probably obtain one from your supplier). The form should include complete identification of prospect, salesman, and company type of building, type of construction, basement, insulation in walls and attic, windows, storm windows, weatherstripping, heating system, type of plant, fuel, type of firing, and controls. From the information obtained, compute heat loss.

If you're going to do a thorough job—and you should—you will need a good deal of equipment for the job, such as steel tape measure, instruments for measuring CO_p, air velocity at registers and ducts, checking voltage of pilot thermocouple, a draft gauge, and a full selection of tools.

You will also want some drafting paper, on which you can sketch the floor plan of the residence. This will help give you a picture of general dimensions, circulation, sleeping vs. Iving areas, etc.

Many jobs will not call for anything this elaborate. It may be that your prospect has need for a direct heating system. Scientific instruments would not be called for in simple installations. Nevertheless, don't trent such conditions casually. A floor plan of the house will still be helpful to you in getting across your points to the housewife. Like the picture in the Chinese proverb, the floor plan is worth many words.

If the setup is an elaborate one, calling for a complete and detailed heating survey, be sure not to rush it. Complete your survey, discuss the existing system, pointing out in a general way the advantages of a new system, and let her know you want to engineer a new system, which will take time. Leave her a givenway.

This approach only paves the way for the sale. Back at the office, work out a good system to replace the old, figure all the costs, and make up a personalized presentation. Do a noot, impressive job. Put it in a folder or binder, and clip in specifications sheets and sales literature on the equipment you intend to promote. Then make an appointment, and get both husband and wife in on this. Set it up for the evening, if possible. Present your proposal and move toward closing the sale at that time.

Call on your manufacturers and associations for help

If you're seriously interested in making this a banner househeating sales campaign, you can count on your manufacturer to provide plenty of help.

Specific selling aids cover a broad range and include such important items as ad mats, mailing pieces, cooperative money for radio, newspaper, and TV advertising; display items such as point-of-purchase posters, window streamers, etc.; givenway inducements; trade-in plans; demonstration personnel; display layouts; and consumer media advertising support.

In an informal survey of most of the leading manufacturers of domestic heating equipment, BPN uncovered these plans for the 1959 campaign.

Adams Bros. Manufacturing Co., Inc. features free ad mats and literature, cooperative radio and newspaper advertising on a 50-50 basis up to a maximum of 2 per cent of total nurchases.

A cutaway heater is available. Givenways can be obtained on request if the proposed dealer campaign qualifies. Under similar circumstances, Adams will also furnish a demonstration.

American Gas Association makes available its display aids to LPG dealers who are members of the National LP-Gas Council.

It's latest heating display is a three – dimensional, animated affair. Measuring 32 in. by 28 in., it shows three little children nodding happily in their sleep and the message "for carefree comfort, heat with automatic GAS." Operated by a single flashlight battery, the unit costs \$6.



A new way of life...with

The Arkla-Servel SUN VALLEY* gas air conditioner will mean a NEW WAY OF LIFE for THE ENTIRE FAMILY.

Actually CHANGES the living pattern...giving MANY BENEFITS

- * BETTER HEALTH
- CLEANLINESS
- * INCREASED PROPERTY VALUE

and most important . . . BETTER FAMILY LIVING. Install
a SUN VALLEY gas air conditioner for
COMFORT . . . and ECONOMY.

FOR FURTHER INFORMATION ABOUT GAS AIR CONDITIONING, SEE YOUR LOCAL GAS COMPANY OR WRITE





ARKLA AIR CONDITIONING CORPORATION

SHANNON BUILDING . LITTLE ROCK, ARKANSAS

ALSO ASK TO SEE THE NEW SENTRY GASLITE



Gaslite w ARKA

BIGGEST NAME IN DECORATIVE OUTDOOR LIGHTING

customer over his original sales resistance barrier.

Plan the sales "pitch" with your salesman. The day of giving a "drummer" a suitcase full of samples, a pencil, and an order book is gone. Today, sales efforts should be carefully planned in advance. Teach your men to talk in terms of the customer's comfort, of her general well-being. Top-notch salesmen will tell you that the sale must be "romanced." You don't sell a customer on Btu inputs; you sell her on what the appliance will do for her.

Ideally, a good demonstration would include working models of the equipment you are going to sell. Obviously, it's impossible to carry a central furnace into the prospect's home, but there are aids available from your manufacturer. Several offer valve hookups and cutaways which make interesting and useful conversation pieces. A thermostat is a handsome item, and it can be carried into the customer's home. Attractive pictures of heating installations, which should be included in the sales manual, should be shown to her so she can visualize what her own home would look like

with comparable equipment.

If you are doing a heating survey, do it right, using a form made out for that purpose (you can probably obtain one from your supplier). The form should include complete identification of prospect, salesman, and company type of building, type of construction, basement, insulation in walls and attic, windows, storm windows, weatherstripping, heating system, type of plant, fuel, type of firing, and controls. From the information obtained, compute heat loss.

If you're going to do a thorough job—and you should—you will need a good deal of equipment for the job, such as steel tape measure, instruments for measuring CO₂, air velocity at registers and ducts, checking voltage of pilot thermocouple, a draft gauge, and a

full selection of tools.

You will also want some drafting paper, on which you can sketch the floor plan of the residence. This will help give you a picture of general dimensions,

circulation, sleeping vs. living areas, etc.

Many jobs will not call for anything this elaborate. It may be that your prospect has need for a direct heating system. Scientific instruments would not be called for in simple installations. Nevertheless, don't treat such conditions casually. A floor plan of the house will still be helpful to you in getting across your points to the housewife. Like the picture in the Chinese proverb, the floor plan is worth many words.

If the setup is an elaborate one, calling for a complete and detailed heating survey, be sure not to rush it. Complete your survey, discuss the existing system, pointing out in a general way the advantages of a new system, and let her know you want to engineer a new system, which will take time. Leave her a givenway.

This approach only paves the way for the sale. Back at the office, work out a good system to replace the old, figure all the costs, and make up a personalized presentation. Do a neat, impressive job. Put it in a folder or binder, and clip in specifications sheets and sales literature on the equipment you intend to promote. Then make an appointment, and get both husband and wife in on this. Set it up for the evening, if possible. Present your proposal and move toward closing the sale at that time.

Call on your manufacturers and associations for help

If you're seriously interested in making this a banner househeating sales campaign, you can count on your manufacturer to

provide plenty of help.

Specific selling aids cover a broad range and include such important items as ad mats, mailing pieces, cooperative money for radio, newspaper, and TV advertising; display items such as point-of-purchase posters, window streamers, etc.; giveaway inducements; trade-in plans; demonstration personnel; display layouts; and consumer media advertising support.

In an informal survey of most of the leading manufacturers of domestic heating equipment, BPN uncovered these plans for the

1959 campaign.

Adams Bros. Manufacturing Co., Inc. features free ad mats and literature, cooperative radio and newspaper advertising on a 50-50 basis up to a maximum of 2 per cent of total purchases.

A cutaway heater is available. Giveaways can be obtained on request if the proposed dealer campaign qualifies. Under similar circumstances, Adams will also furnish a demonstration.

American Gas Association makes available its display aids to LPG dealers who are members of the National LP-Gas Council.

It's latest heating display is a three - dimensional, animated affair. Measuring 32 in. by 28 in., it shows three little children nodding happily in their sleep and the message "for carefree comfort, heat with automatic GAS." Operated by a single flashlight battery, the unit costs \$6.



A new way of life...with

GAS air conditioning

The Arkla-Servel SUN VALLEY® gas air conditioner will mean a NEW WAY OF LIFE for THE ENTIRE FAMILY.

Actually CHANGES the living pattern...giving MANY BENEFITS

- BETTER HEALTH
- * CLEANLINESS
- * INCREASED PROPERTY VALUE

and most important . . . BETTER FAMILY LIVING. Install
a SUN VALLEY gas air conditioner for
COMFORT . . . and ECONOMY.

FOR FURTHER INFORMATION ABOUT GAS AIR CONDITIONING, SEE YOUR LOCAL GAS COMPANY OR WRITE



S U N V A L L E Y

ARKLA AIR CONDITIONING CORPORATION
SHANNON BUILDING . LITTLE ROCK, ARKANSAS

ALSO ASK TO SEE THE NEW SENTRY GASLITE



Gaslite ov ARKA

BIGGEST NAME IN DECORATIVE OUTDOOR LIGHTING

American-Standard Air Conditioning has just announced a new-approach homeowner presentation, consisting of two parts, the analysis and the sale.

A detailed heating and air conditioning analysis is made by the dealer, noting the comfort situation in each room. The same form contains a questionnaire intended to establish the personal feelings of the homeowner on his comfort conditions and to determine his wants. Once the customer has thus established his needs, the

dealer can then plan the new heating system. If a complete installation is not sold immediately, the first sale then becomes a prelude to future sales.

The actual presentation is a 16-page folder that is personalized for the prospect and left with him. It begins by explaining that the dealer has made a complete heating and cooling survey, outlining the essentials of year-round air-conditioned comfort, and presenting 22 reasons why year-round air conditioning is a good buy.

Space is then provided to list the present equipment, itemize additional equipment needed, and diagram present and future duct work. The last pages sell the prospect on American-Standard equipment.

Arkla Air Conditioning Corp. has a rounded dealer aid program for its nationally-marketed Sun Valley all-year air conditioners and plans a similar program for its recentlyacquired line of Humphrey heating equipment, which continues to be sold by Humphrey dealers.

Ad mats, available for dealer use, are believed to be the first to use the theme: "Buy your heating now and get summer cooling as a bonus." Arkla has no cooperative advertising program, but advertises extensively on a national basis in cooperation with AGA and urges its dealers to tie in local ads with the national campaign.

Mailing inserts are available at no cost to the dealer and a large selection of advertising and sales aids are available at nominal cost. Included are two-color decals, multi-color consumer brochures, site signs, point-of-purchase displays and sale cards. In addition, the firm cooperates with AGA to make available car, counter, and truck cards, and 24 sheet posters.

Arkla has had "almost no demand" for giveaway specialties and does not supply such to dealers.

The firm does not have standard display layouts because of "varying dealer conditions," but "will be happy" to suggest display ideas upon a dealer request.

Bryant Manufacturing Co. has a demonstration aid in the form of a valve kit which the dealer can use to close sales in the home.

Another unusual dealer help is a background for use at county fairs, home shows, and similar affairs.

Bryant makes available ad mats, a new series of 36 direct mail cards, and a great deal of point-of-purchase material. Cooperative money is available for both promotion of the company's products and advertising. Advertising specialties are also offered by the company.



Dearborn Stove Co. offers these selling aids, some at nominal cost: descriptive literature, mailing pieces, newspaper ad mats, radio scripts, transcriptions, window banners, point-of-purchase materials and billboard paper.

Dearborn's liberal cooperative advertising program embraces all recognized media. Up to 5 per cent of a dealer's purchases is available on a 50-50 participation

Empire Stove Co.'s big promotion for 1959 is a repeat of the highly successful "Heat Thief" campaign of 1958. Assistance in laying out a complete program is given by Empire, and includes free ad mats and a "reasonable" number of free mailing pieces, a cooperative radio, newspaper, and publicity plan (up to 2 per cent of net purchases); point-of-purchase posters, window streamers, floor display backgrounds, and counter cards, all free; and suggested display layouts. A demonstrator is also available on request.

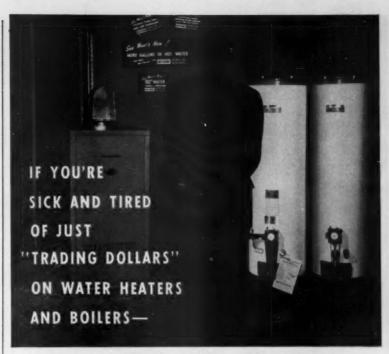
As a part of the "Heat Thief" campaign, Empire also has a package of radio spots and heating system check forms.

Holly-General division of Siegler Corp.'s big promotion for this year is "Gold Mine Line for '59."

Sales tools for the dealer include street corner directional signs pointing the way to model homes, job signs to put up in front of the houses, a new saddle sign to hang over the furnace closet door without marring the finish of the door, brochures explaining the facts about Holly equipment and installation for the builder to distribute to home buyers, string cards to hang on wall thermostats, newspaper ad mats, television and radio announcements copy and other specifications and sales folders.

A "starter package" offer to dealers includes one furnace and air conditioner at a special floordemonstrator price, and a free complete set of all the sales helps for builders.

Hydro-Therm Inc. supplies literature, 16 ad mats and 6 mailing pieces free of charge.



RETURN TO PROFIT

Here's a new deal in profitable selling of gas fired and electric water heaters and boilers. Consider it carefully.

Too many of you in the business have been just "trading dollars" on this merchandise. You must do better to stay in business. It's high time that we return to profitable selling!

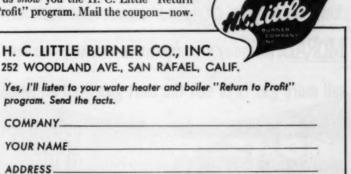
PROGRAM FOR PROFIT

The H. C. Little deal is a program for profit. The program is direct and simple. It is based on three essentials:

- Texclusive, built-in product features that sell!
- A complete merchandising package for volume sales, turnover-and profit!
- Competitive pricing.

Get the facts!

Let us show you the H. C. Little "Return to Profit" program. Mail the coupon-now.





Why SCROUNGY GASMAN turned down a good thing...

SCROUNGY GASMAN was a very

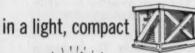


short-sighted

LP Gas dealer. When he looked over Hydrotherm's wetheat equipment, he saw what fuel misers these boilers were. He preferred a gas-gobbler that would keep his fuel deliveryman busy. Hydrotherm's big water passages and simple circulation system were so foolproof he would miss those lovely

midnight service calls. And finally, because

Hydrotherm comes pre-wired and assembled



package, he might lose

some profits on shipping and installation.

So SCROUNGY, being short-sighted



down Hydrotherm . . . but his prospects turned him

down for

oil (excuse the expression).

MORAL: In today's competitive market, the way to sell more gas is to sell the best gas-fired equipment.



Write for full



information to

HYDROTHERM & Dept. 13-B-P Northvale, New Jersey

 Hydrotherm boilers, HydroFin baseboard radiation units, HydroVector & HydroChiller.heater-coolers, Multi-Temp †Hydrotherm achieves a higher heat transfer per pound of cast iron than ever before possible
 *Compact, simple Hydrotherm packaged hydronic (wet-heat) systems are competitive with warm air installations Display items are available at \$3.00 each.

A demonstrator is available at a nominal cost to the dealer.

H. C. Little Burner Co. has built its campaign around the "package for profit," under which philosophy the factory accepts the responsibility for helping the dealer move the product. Under this theory, Little offers—

 Ad mats in sizes from one to four columns.

• Broadsides, stuffers, and data sheets for use as mailers.

A cooperative program implemented through distributors.

- A "Home Modernizers" kit giveaway, consisting of a folder with pocket inserts showing suggested ways of "stretching your heating dollars," remodeling an existing room into a family room, adding on rooms, and converting rooms to "special rooms for special people." Offered at cost to the dealer, together with announcement window banner.
- A fall advertising campaign in the shelter magazines.
- Assistance in arranging displays.
- Display items including a satin banner, electric sign, a floor display, a motel sign, and a window strip.

Locke Stove Co. has an eight-point program of dealer aids.

First, a comprehensive selection of free newspaper mats.

An array of store and window display material, including "Day-Glo" banners, easel cards, on-theproduct displays, and a special lighting kit to illuminate the burner radiants.

An assortment of mailing pieces. A "boxholder broadside mailing program." This is a "small-town-rural" special, and it's in the form of a large, colorful newspaper broadside. Locke furnishes the piece and does the imprinting of the dealers' name. Cost to the dealer: postage. In support of this mailing, Locke furnishes an assortment of direct tie-in window and store display materials.

Radio and TV scripts.

Twenty-four sheet posters for outdoor advertising.

Designs and layouts for outdoor painted signs. The company shares the cost.

Cooperative advertising on a 50-50 basis up to 5 per cent of the net invoice value of the dealers' purchases.

Minneapolis-Honeywell Regulator Co. has a triple-header merchandising program for the heating and air conditioning industry.

First, there's the "Two Furnace and Two Zone" concept.

Aimed at the consumer, it takes shape with ad campaigns in national consumer magazines, builder magazines and leading trade magazines.

A big builder announcement will be mailed to over 25,000 builders across the country.

Contractor's kits are available for both warm air and hot water heating. Each sales booster kit contains material for the dealer to pass on to the builder as well as materials for his own use.

Home promotion materials include offers of "Two Furnace and Two Zone" thermostat signs, newspaper ad mats, artwork for program tie-in symbols, a sheet of suggestions on how to promote the program, and a materials order blank.

Second, there's "Milady's Climate," a residential year 'round air conditioning program that goes direct to the housewife.

A motion picture, "Mother Knows Best," is available free to be shown at homemaker gatherings and cooking schools, plus civic and social groups.

Twenty-five copies of a fullcolor consumer booklet are available free of charge. Additional copies can be ordered at a nominal cost.

Third, there's "Operation Heat Wave." It is based on local newspaper advertising and a free customer offer tied in with each town's first 84 deg. day after June 1. Customer offer includes a free filter-flag, survey, thermometer, and a copy of "Milady's Climate." Equipment for the free offer is available through regular wholesale channels.

Mission Appliance Corp. features newspaper ad mats, point-of-purchase displays, and prerecorded





Reznor Manufacturing Company, 4 Union Street, Mercer, Pa.



U N V E N T E D
HEATMAKERS

A.G.A. APPROVED



RANCHERO" SERIES
Cool Cabinet Type
3 Sizes



"LITTLE GIANT"
Circulators
2 Sizes



"GOLDEN MARVEL" SERIES 3 Sizes

AUTO-SAFETY

CONTROLS

AVAILABLE

Gas heat at it's Finest

DISTINCTIVE creations for beautifying any Fireplace . . . and real heatmakers, too. Fashioned of high-fire refractory to similate Silver Birch, Rustic Oak or Coal . . . in color and texture. Castiron Burners, convenient shutoff, etc. Sizes range from 20,000 to 28,000 Btu.

ALSO excellent selection of Unvented Consoles, Radiants, Auxiliary & Utility models; range from 7,000 to 42,000 Btu.

Write

CATALOG NO. 59 for all Consoles, Utility and Fireplace Heaters. SPECS FILE NO. 773 for Sealed

SPECS FILE NO. 773 for Sealed V.O.M. On-Wall Heaters; no chimney SPECS FILE NO. 753 for Vented Recessed In-Wall Heaters.

FOR NATURAL . MANUFACTURED . MIXED . LP-GASES

THE OHIO FOUNDRY & MFG. CO. "Americo's Finest Since 1846" STEUBENVILLE, OHIO

radio spots. Reasonable amounts of envelope stuffers are available without charge. If dealers desire additional stuffers Mission can arrange with its distributor to co-op the price of additional quantities. Co-op money is available for legitimate expenses.

On request of a dealer Mission's product manager will decide if an item is to be used as a giveaway. On request a demonstrator will be furnished.

Mueller Climatrol has a complete line-up of aids to assist its authorized dealers in conducting heating campaigns. The firm works with individual dealers and help includes mapping out schedule and assisting with plans for advertising, canvassing, and customer referral campaigns.

Help is provided with all forms of advertising, including direct mail, includes copywriting and layout. A complete advertising mat catalog and mailing pieces are available for different types of campaigns. Suggested personal letters can be run off by a dealer on his own stationery to mail to prospects, architects, etc. Costs of advertising in legitimate media are shared on a cooperative basis.

Mueller Climatrol has a 16page catalog of merchandising material which can be purchased by dealers. Signs and labels available include outdoor and indoor signs, highway signs, installation house signs, installation name plates, clock and thermometer signs, window decals, and installation and service labels and decals. Display materials include: large and small displays, literature and display racks and cases, and sign and hanging display kits. Advertising aids are radio and television scripts, television slides and film strips, billboards, 'customer referral folders, new home floor runners, and book matches. Special business aids include: business cards, stationery, business forms, binders, brief cases, heating survey forms. and servicemen uniforms. Giveaway items are limited to thermometers and warranty cases.

Depending on what is available at the time of request, Mueller may furnish furnace models or

demonstrators as displays. Displays, window streamers, etc., (as well as direct mail pieces) frequently tie-in with the firm's national advertising.

National LP-Gas Council is running home heating ads in July Better Homes & Gardens, July and August American Home and July state farm papers.

Local dealers can refer to such advertising, as well as to AGA ads in national magazines and on television's "Playhouse 90".

Ohio Foundry & Manufacturing Co. offers these selling aids in reasonable quantities at no charge: catalog material, envelope stuffers, ad mat proof sheets, displays, point-of-purchase cards, and window streamers.

Peerless Manufacturing division of Dover Corp. supplies ad mats, mailing pieces, and window displays on a no charge basis.

The company's salesmen will work with dealers on a promotional program.

Perfection Industries has a mailing piece, somewhat similar in appearance to Locke's "broadside." which is imprinted and mailed at cost. There are also a broad selection of ad mats, supplied at no charge, and a cooperative advertising plant for radio, newspapers, trade shows, outdoor, and other types of promotions.

Display items include point-ofpurchase posters, window streamers, and some highly unusual items such as:

- · An ad-clock with a sales mes-
- · Background drapes with the "Perfection Triangle" de-
- · Identification sign.
- · Spiral-bound sales demonstrator portfolio, animated by use of pull tabs.
- · Spots-and-banners "pay day" display.
- · Decals and identification signs.
- · A plastic display and air conditioning "mobile" (hanging) display.

The company also offers model





The Brand NEW Armstrong

Series 200 Vented Circulators—with or without "flame view" feature—designed with that "sheer look" to fit in with any furnishings.

For use with Natural-Mixed, Manufactured and LP Gases. 30,000, 40,000, 50,000 and 70,000 BTU. Finished in Armstrong's own "Mocha-tone" tan with front grille in contrasting gold silicone enamel. Front removable for easy cleaning.

Blower converts to a forced air unit in a few minutes.

Write for full specifications, also data on all 60 Arm-strong models and sizes.

Armstrong Products Corp.





Raypak the only fully automatic swimming Solid copper and bronze waterways prevent

rust, discoloration and corrosion. Rugged handsome jacket blends into your

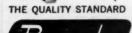
landscaping.

Lifetime stainless steel gas burners for top efficiency, quiet operation and fuel savings. Fully equipped with reliable controls.

Unatherm Governor controls boiler temperatures to eliminate condensate and practically eliminate scaling. Obviates need for expensive indirect system.* Internationally distributed United States, Canada, Mexico.

Wide range of sizes.

* Indirect system also available.



COMPANY, INC. **Engineers-Manufacturers**

RAYPAK PROVIDES THESE OUT-

STANDING FEATURES TO DOUBLE

THE USE OF YOUR POOL.

2416 CHICO AVENUE,

EL MONTE, CALIFORNIA



Only a small portion of the Heat Thief campaign kit offered by Empire Stove Co. is shown here.

home displays in the form of a "Day-Glo" builder's display kit. Included are imprinted lawn signs and arrows, booklets, roll of "red carpet" floor guard, etc.

A demonstration program is carried on at the wholesale level. The district manager makes the demonstration for the dealers at the wholesaler's plant, the dealer in turn repeating the presentation to his own customer at home.

Perfection works through its wholesalers in cooperative consumer advertising.

Suggested display layouts are furnished with the company's own background display materials.

Preway Inc. has newspaper ad mats available at all times at no charge as well as radio scripts and if needed, specially prepared TV material. In addition, the company has posters, banner kits and demonstrators which for the most part are available at a moderate charge.

Literature on all the company's products is available at no charge.

Queen Products division of King-Seeley Corp. will mail on July 15 to all its gas dealers a complete promotion kit, which includes banners, streamers, easels, pointof-sale cards. The kit contains sufficient advertising material so that a dealer may put up a window display as well as a counter display in his store.

Ad mats, a gas broadside with a special trade-in allowance for the customer's old heater, catalog, envelope folders, and many other additional mailing pieces are available.

A complete gas demonstration kit which is portable so the dealer can show his customer exactly how gas operates and how safe it is is another aid.

Queen has a cooperative advertising program with each of the accounts through a percentage of their purchases.

Stiglitz Corp. has one four-color and one two-color mailing piece as well as ad mats, for which they do not charge.

The company also has cooperative money available for radio, newspaper, advertising and publicity.

Temco Inc. furnishes tailored display layouts on request. These are built around a number of floor display items, which include:

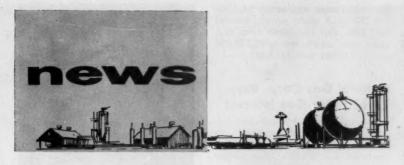
- Sales erector displays for cabinet and wall heaters and floor furnaces.
- Decals for truck or entrance door on display window, window streamers, silk banners, and plastic signs.
- · Thermostat control boards.
- "Touch cool" product card display.
- Live-gas demonstration owner displays.
- Cut-away models (limited offer).

Temco also provides giveaway items—key chains, tie clasps, etc.

The items are sold at cost and chargeable to the co-op fund, which also extends to advertising in approved media and trade shows. Mats are at no charge.

X

A REPRINT of this special househeating section is available without charge. Write Dept. M., BUTANE-PROPANE News, 198 S. Alvarado, Los Angeles 57, Calif.



Grayson mails over 2½ million pieces in first month of consumer safety campaign

THROUGHOUT April, response snowballed to the consumer safety campaign launched early in the month by the Grayson Controls division of Robertshaw-Fulton. By the end of the month, Grayson had sent a total of 2,652,289 promotional pieces to 1170 dealers around the country.

As reported in BPN last month, Grayson began this, the industry's first concerted consumer safety campaign, quietly and unobtrusively, sending out 35 management-level men to cover every LPG dealer in the nation via across-the-desk talks with owners and managers.

Their 30-minute presentation was intended to sell dealers on two

ideas: 1. Giving a Grayson-provided brochure to every LPG customer; and 2. Making a safety survey of every customer's appliance system, using Grayson-supplied survey forms and tool kits.

The response was instantaneous with the first day's dealers' orders wiping out the initial supply of 100,000 brochures and 100,000 survey forms. Month-end totals included: 1,436,728 ho me owners' brochures, and 1,205,516 survey forms. (Incidentally, neither form bears any reference to Grayson Controls or Robertshaw-Fulton.)

At the end of April, A. C. Hanson, assistant to Grayson's general manager, reported that approximately 99 per cent of the dealers National Board of Fire Underwriters figures), but we can make it even safer." Assuming that 80 per cent of the accidents can be eliminated, Grayson traces them to improper installation and uninformed customers. Thus, it supplies the survey form to encourage the inspection of all current installations to eliminate existing causes

are going along with the program.

The approach that rates such acceptance is basically this: "Gas is now the safest fuel (according to

While Grayson's representatives deal only with members of management they make sure the program is sold all the way down the line by providing posters, service literature, tool kits, and even service schools, if necessary.

of accidents and the customer bro-

chure to prevent future causes.

Ascot opens Cleveland sales and service office

Ascot Gas Water Heaters Ltd., London, Eng., announces the opening of a new United States sales and service office in Cleveland, Ohio.

Complete warehouse stocks of Ascot boilers and water heaters will be maintained as well as service facilities and a full line of replacement parts.

Under the direction of Lauren H. Nichols, the new office supplants and expands the services of the now-closed Equipco Inc., Chicago.

With the exception of the Southeastern and Pacific Coast states, all inquiries should be directed to: Ascot Gas Water Heaters Ltd., 1300 W. 9th St., Cleveland 13. Southeastern inquiries should go to: Southern Heater Co. Inc., 844 Baronne St., New Orleans 12, La.; Pacific Coast inquiries to: Equipco Sales Inc., 1238 N. W. Glisan St., Portland 9, Ore.

Pyrofax completes 31st annual distributor meet

Pyrofax Gas Corp., a unit of Union Carbide Corp., recently completed its 31st annual series of sales meetings. Over 2500 members of its distributor organization attended from 28 states and Eastern Canada.

An appliance and equipment exhibit was a major feature at each meeting. Over 25 manufacturers displayed 1959 lines.

An entire day's program was



In this typical demonstration, a Grayson Controls representative flips the pages on the easel-mounted presentation to LPG dealer management. Alongside the easel is the consumer brochure, and in front of it, the tool kit. The dealer holds a folder describing Robertshaw-Fulton's training school fleet, while the Grayson representative holds one of his firm's tamper-proof controls.

devoted to selling, with every speaker describing methods of accomplishing this vital task in the various aspects of "Pyrofax" business.

Fluid Controls announces two voluntary standards

The Fluid Controls Institute Inc. has published two new voluntary standards which were adopted at its fall meeting. They are "Definitions of Regulator Capacities" (FCI 58-1) and "Recommended Voluntary Standards for Measurement Procedure for Determining Control Valve Flow Capacity" (FCI 58-2).

Single copies will be furnished free, additional copies at a nominal cost. Write: Fluid Controls Institute, 320 Broadway, New

York.

Suburban registers record sales and earnings

Suburban Gas Service Inc. registered record sales and earnings for the nine months ending Jan. 31, 1959, President W. R. Sidenfaden announced in an interim report to shareholders.

Sales for the period amounted to \$7,673,212 and net profit totaled \$690,903, compared to sales of \$5,708,498 and profit of \$587,607 for the same period last year.

For the 12 months ending Jan.



Samuel F. Shawhan (right), president of Bryant Manufacturing Co., receives a wristwatch in recognition of 30 years service. Presenting the award is Lyle C. Harvey, senior vice president of Carrier Corp., of which Bryant is an operating division.

31, 1959, sales amounted to \$10,040,255 and net profit totaled \$971,162. For the same months a year ago, sales were \$7,578,056 and net profit was \$873,584.

General Gas Corp. buys Texas Petro Gas interest

General Gas Corp. recently acquired controlling interest in Texas Petro Gas Co., Houston, a producer and wholesale marketer of natural gas liquids.

Hal S. Phillips, president of General Gas, said that no change is contemplated in Texas Petro management or operation.

Texas Petro was formed last January by Forrest S. Warren, a former vice president of Texas Natural Gasoline Corp. of Tulsa. Warren has now been named a vice president of General gas and elected to its board of directors.

Fligelman named v. p. of new investment company

Stephen H. Fligelman, public relations director of United Petroleum Gas Co., Detroit Lakes, Minn., has been named vice president of the newly-formed First Midwest Small Business Investment Co., Minneapolis, Minn.

The new investment firm, one of the nation's first to be licensed under the Small Business Investment Act, will provide long-term and equity financing for small businesses throughout Minnesota, Wisconsin, North and South Dakota

Ridge adds two "Mobile Demonstration Wagons"

Two Ridge Tool Co. "Mobile Demonstration Wagons," showing the newest in pipe tools, have been put in service, according to J. E. Butler, manager, sales promotion.

Ronald W. Ifould will cover Quebec and the Maritime Provinces with one wagon. John R. Wall will use the other to cover the southeastern states of Florida, Georgia, Alabama, Mississippi, Tennessee and South Carolina.

Working from station wagons especially equipped with portable generators, both men will demonstrate all the Ridgid pipe and bolt threading machines and power drives.

More "Mobile Wagons" will be added to the fleet until all territories have them.



L. H. McGuire (left), R. P. Jackson and L. A. Katz, representing a total of 62 years' experience in the L. P. gas industry recently received promotions at the Suburban Propane Gas Corp. McGuire now heads the newly created department of employee relations; Jackson is in charge of product supply and traffic; and Katz is manager of operations.

NEWS NOTES

Beam Products Manufacturing Co. has completed an addition to its Los Angeles plant. Devoted to Research and Development, it will also contain the Toolmakers section, and will open up additional assembly space in the main building.

Suburban Propane Gas Corp. purchased the International Chemical Extinguisher Corp., Atlanta, Ga. The purchased firm had exclusive manufacturing rights for the patented Keefe dry chemical fire extinguisher systems and portable extinguishers.

Neptune Meter Co. was listed on the New York Stock Exchange just recently. It will be identified by the symbol "NPM" which it brings from the American Stock Exchange, where it was listed since 1925.

Century Gas Equipment of the Marvel-Schebler Products division, Borg-Warner Corp., Decatur, Ill., has come out with an easy-to-use, comprehensive dealer-distributor sales package for promotion of L. P. gas as a motor fuel. It includes: a detailed folder explaining use of the promotional

material, an 8-page advertisingselling kit, newspaper mats, envelope stuffers, news release forms, and extra selling tips.

Recommendations for the elimination of high stresses in gas pipeline branch connections are outlined in a new engineering report published by AGA's Pipeline Research committee. Copies are \$2.00 each from the AGA, 420 Lexington Ave., New York 17.

The Heating, Ventilating, Air Conditioning Guide 1959, has been published by the American Society of Heating, Refrigerating, and Air Conditioning Engineers. This 37th edition contains larger illustrations, working charts, and tables, including 286 new or revised diagrams and charts. It is available from the Society, 62 Worth St., New York 13. Single copy price is \$12.00.

Sid Harvey of Md. Inc. moved into a new building at 921 N. Jackson St., Clarendon, Va. The building was designed by Sid Harvey to handle its full line of replacement parts for automatic heating.

Help yourself to lower phone book ad costs

In the near future, telephone directory publishers are going to make a survey among L. P. gas dealers. They will quiz L. P. gas dealers as to what single heading they would like used in the yellow pages.

To eliminate duplication of classification listings with their doubled and tripled ad costs, the National LP-Gas Council has recommended THE single heading of:

"Gas—Liquefied Petroleum."

If the overwhelming majority of dealers respond in favor of the heading, chances are excellent it will be the single classification adopted for the industry.

The National Council has also requested phone companies to carry free cross references under "Butane," "Propane," "Bottled" and "Bulk Gas." If a phone book user looks under these classifications, he would be advised: "See Gas—Liquefied Petroleum."



This transport tank manufactured by Lubbock Machine & Supply for the Maersk Refinery of Copenhagen, Denmark, is a neckdown unit fabricated from T-1 steel (X-rayed and stress-relieved), with a capacity of 7700 gal. and a weight of 18,200 lb. The Maersk Refinery is the only producer of L. P. gas in Denmark and supplies about one-third of Danish production.

The National Better Heating-Cooling Council has moved to larger quarters at 250 Park Ave., New York City, the same address the organization has maintained since its founding in 1956.

Clifford Tweter, executive vice president and director of California Bank and Firstamerica Corp., has been elected to the board of directors of Suburban Gas Service Inc. He will replace Paul Fannin whose recent election as Governor of Arizona necessitated his resignation from the board.

Pyrofax Gas Corp., unit of Union Carbide Corp., recently opened six new bulk filling plants. They are located in Ladysmith, Wis.; Sanborn, N. Y.; Napoleon, Ohio; Mansfield, Ohio; Benson, Minn.; and Sebewaing, Mich. This brings to 113 the number of Pyrofax Gas cylinder filling and bulk plants.

The AmeriVent division of American Metal Products announces a newly completed sound stripfilm on gas appliance venting. It is available for use by gas utility training groups, plumbing and heating association meetings, etc., by writing R. E. Hewitt, 6100 Bandini Blvd., Los Angeles 22. The film covers the evolution of venting from cave-man days and explains the principle and importance of proper venting.

Milwaukee Stove & Furnace Supply Co., 5070 W. State St., Milwaukee, was appointed the Wisconsin state distributor of Bryant Manufacturing Co. The firm will distribute Bryant's full line.

Robertshaw will build new plant at New Stanton, Pa.

A \$4 million contract for construction of a new plant and office building at New Stanton, Pa., has been signed by Robertshaw-Fulton Controls Co.

The new plant will replace present manufacturing facilities operated at Youngwood, Pa., and Scottdale, Pa., by the controls firm's Robertshaw Thermostat division. It will be built on a 260-acre site at the New Stanton interchange of the Pennsylvania Turnpike.

Frank H. Post, vice president of Robertshaw-Fulton and general manager of Robertshaw Thermostat division, said that completion is planned for mid-1960.

Siegler and Rheem enter joint manufacturing pact

A joint manufacturing arrangement for the production of consumer products in the home equipment field has been made by the Siegler Corp. and Rheem Manufacturing Co., it was announced recently by both companies.

John G. Brooks, Siegler president and A. Lightfoot Walker, president of Rheem, said the arrangement will affect plants of both companies located in Southern California.

The new plan, worked out through the combined efforts of the Holly-General division of Siegler and the Home Products division of Rheem, calls for the manufacture of Siegler's line of General water heaters at the Rheem plant in South Gate. Con-



THERE'S A CORKEN DISTRIBUTOR NEAR YOU . . .

CORKEN'S INC.

P. O. BOX 1062 . CE 5-5517 OKLA. CITY, OKLA., U. S. A. currently, plans are being made for the production of certain added lines of Rheem heating equipment at the Pasadena plant of Siegler.

Both Brooks and Walker noted that the joint arrangement covers only manufacturing activities of both companies. They stressed the fact that the existing lines of both General and Rheem water heaters will maintain complete individual product identity.

Caloric announces dealer publicity kit

A complete publicity and public relations kit for appliance dealers is now available from the Caloric Appliance Corp., Jenkintown, Pa.

The kit explains what publicity is, what it can do, and how it can affect sales. Detailed instructions are given on planning a publicity program, preparing and placing news releases and feature stories, along with a lengthy list of "tips" on possible publicity subjects. Included are several releases and photos which can be released locally by the dealer, using his firm name.

Provision is also made for dealers to request a continuing supply of such material.



Southern Winding Service, Tampa, Fla., one of the nation's largest rebuilders of armatures for portable electric tools, finds LPG the ideal fuel for burning off old wires in a hurry and without damaging delicate laminated steel armature sections. Gas flows around the steel frame, feeding a series of jets which direct the flame exactly where it's needed.



TEXACO'S DEPENDABLE SUPPLY OF LP-GAS MEANS A SOLID FUTURE FOR YOU

No question about it, Texaco LP-Gas Distributors have a big edge because they are assured of on-time, dependable deliveries. Texaco is one of the largest producers of LP-Gas and has a new fleet of tank cars for fast delivery.

If you are looking for a solid future, consider this fact: 683 distributors of Texaco products have been with us for 20 years or more — many others for as long as 45 years. These men have

found it pays to be on the Texaco team of successful Distributors.

5 reasons why it pays to be a Texaco LP-Gas Distributor

- 1. A product of highest quality-moisture-free.
- 2. Dependable and efficient delivery, in a new fleet of tank cars, from 31 strategically located production areas.
- 3. Immediate acceptance. Texaco LP-

Gas is sold under the nationally famous trade-mark, the Texaco red Star with the green "T."

4. One of the largest producers of LP-Gas, Texaco is the only petroleum company to build up successful distribution of its products nation-wide.

Profitable and proved sales policies.
 Texaco does not compete with its independent distributors of LP-Gas.



Team your name with Texaco and profit. Let us tell you about the opportunities for a sound and profitable business with Texaco LP-Gas. Call or write today . . . Texaco Inc., LPG Sales Division, P. O. Box 2420, Philtower Bldg., Tulsa, Okla., DIamond 3-4101; 3350 Wilshire Blvd., Los Angeles 5, Cal., DUnkirk 5-0515.



REA reorganization bill dead! Veto override fails by 4 house votes

THE Eisenhower Administration and the LPG industry were both wearing the famous Ike-grin-of-victory in early May: the last day of April witnessed the final defeat of the bill that would have returned the Rural Electrification Administration to the rank of a separate government agency.

It was a rough battle. REA supporters put up such a tough fight that they came within four house votes of overriding President Eisenhower's veto, something that has not been accomplished in Ike's six years in the White House.

Events moved very quickly during the final days of the bill's highly controversial life. Early in April, Congress had made it resoundingly clear that it wanted to strengthen REA, passing the measure by a 60 to 27 vote in the Senate and a 254 to 131 margin in the House.

Then, on Monday, April 27th, the President vetoed the bill, calling it "a major retreat from sound administrative policy" and saying it was "contrary to public interest." Backers of the bill anticipated the veto and immediately claimed to have enough votes to override it.

The events of the following day seemed to bear them out, for on the 28th, the Senate voted to overturn the veto. The margin was again 60 to 27, or two votes more than the two-thirds necessary to down a veto.

The House vote came on Thursday, the 30th. Both sides summoned more support. When the vote was taken, REA supporters had increased their margin from the 123 votes that passed the bill to 134, but the latter figure was four votes short of the required two-thirds and the measure was dead.

Originally introduced by Sen. Hubert Humphrey (D), Minn., the bill sought to "keep the REA lending program out of politics" and to insure that "REA loans are approved only by the need and feasibility established by engineering and economic studies."

REA supporters had claimed that Agriculture Secretary Benson attempted to hamstring the lending program by requiring that his office pass on all loans over \$500,-000.

The REA was operated as an independent agency from its organization in 1936 until 1939 when a government commission studying methods of saving money and improving efficiency in government recommended it become part of the Agriculture Department. It was brought into the Department that year. Until 1956, the REA Administrator (now David Hamil), ran a rather independent department.

Then, because some large loans went out and were later turned back in part or in whole, Secretary Benson ordered that his office pass on the larger ones.

In addition, the Administration is impressed with the facts that 96 per cent of all farms now have electric service and that the statutory 2 per cent interest rate charged by the government on these loans is a direct subsidy.

In order to head off Administration moves to clamp tighter control on these loans (75 per cent of which now provide power for industries or other non-farm users), REA supporters in Congress came up with the bill to set up REA as an independent agency.

This bill, it should be understood, was more theoretical than it was basic. It was passed to demonstrate congressional support of the REA program. In practice, it would have had little effect on the program. The Administration would have appointed the REA Administrator, and thus he would become an Administration man, depending for his job on following the policies of the Administration.

In no instance thus far, has Secretary Benson interfered in a decision on a loan made by the REA agency. Co-op power spokesmen have complained that there is a "master plan" in the works to destroy the REA program, and that Benson is at the head; so Congress bared its fangs.

The bill read in part: "The functions and activities of the Rural Electrification Administration and the Administrator of the Rural Electrification Administration . . . are hereby transferred to the Administrator (of the REA) and shall be exercised and administered within the Department of Agriculture . . . under the general direction and supervision of the Secretary of Agriculture; except that insofar as such functions relate to the approval or disapproval of loans authorized to be made . . . their exercise shall not be subject to the supervision or direction of, or to any other control by, the Secretary of Agriculture."

Failure of the veto override brightens the picture for the L. P. gas dealers and others who have been fighting to have the 2 per cent subsidy interest rate on REA loans raised to a more realistic level. The Administration, through the U. S. Treasury Department, has asked that the legal interest rate limit be raised to a figure to cover the costs of the program; but Congress, this year at least, is clearly not going to tighten up the REA program.

Meanwhile, that program goes on with what appears to be more money than can be spent. Last year, the Eisenhower Administration attempted to cut the direct appropriation for loans in half, and send the co-ops to regular commercial money markets for the balance. Congress balked; doubled the recommendation, and put up more than \$300 million.

The REA couldn't find customers for this sum. It loaned only a little less than half of it, so it has some \$181 million left over to apply in the 12 months beginning this July 1; so it only needs some \$136 million in new money. This will give a total of \$317 million to lend but REA still plans on actually lending only \$245 million. This will leave a neat little nest egg of carryover funds with which to start the next fiscal year.

Small business supporting federal fair trade law

Restoration of fair trade will not lessen competition, but will bring "fair, equitable and competitive prices" to the consumer and protect many thousands of small businesses. This is the crux of statements by businessmen sup-

Names you know name



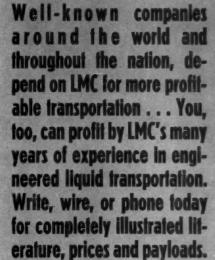
PETROLANE SUPPLY CO., Billings, Montano, a division of Petrolane which operates throughout the West



PHILLIPPINE ACETYLENE Co.; Manila; operating in Manila and throughout the Phillippine Islands.



EARL BRAY, INC.; Cushing, Oklahoma; one of the largest transport companies in the West.





KOSANGAS; Copenhaven, Denmark; has associate companies in Ceylon, Cyprus, and throughout the European Continent.

LUBBOCK MACHINE & SUPPLY CO.



Buy on the



Bes 1509 PO 2-5361 LUBBOCK, TEXAS

Budget or Lease-Purchase Plan porting a new federal fair trade law during recent House Commerce subcommittee hearings.

A host of spokesmen for industries, particularly small merchants, are backing legislation sponsored by Rep. Oren Harris (D), Ark., and a slightly different version sponsored by Rep. Frank W. Boykin (D), Ala.

The "high esteem in which brand name merchandise is held and its wide public acceptance is due to both the quality consciousness of the manufacturers and their retail outlets and to the vast amounts of money that (have) been expended by both for advertising, displaying, and demonstrating," one witness said. This "partnership of promotion" is responsible for the mass production, mass distribution and consistently low fair prices of brand name merchandise, he added.

The retailer who has helped in this campaign over the years has a large invested capital interest in brand name goods, fair trade supporters contend. They warn that opportunists who have not contributed to this buildup are threatening to destroy the present merchandising system which has brought consumers "quality brands at fair, equitable and competitive prices."

Support for the Harris and Boykin measures was dominant through the hearings. Merchants and manufacturers both kept plugging away at the theme that small business particularly needs fair trade to survive; that because manufacturers can't price themselves out of the market, fair trade is competitive and insures against fictitiously high prices.

The drug industry is still the biggest supporter of the measures; but appliance, sporting goods and other industries are also lined up behind them. Many witnesses recounted how the loss of fair trade in recent years has seriously hurt their sales and profits (one appliance manufacturer testified his volume on an annual promotion dropped 84 per cent after fair trade was abandoned). Most of the damage is in sales of national brand names which are used by discounters as drawing items and are dropped by merchants.

brand names which are used by discounters as drawing items and are dropped by merchants.

An expensive but very well received merchandising aid is the \$15,000 Rolls-Royce purchased by Locke Stove Co., Kansas City, Mo., as personal transportation for its new model Moore's gas heater. The spotless showpiece is driven to conventions, trade shows, home shows, distributor's showrooms, dealer meetings, etc., with the heater as its sole passenger. Mounted on an easily removed rear seat platform, the heater can be taken out at the end of its display day to make room for human passengers, who are transported to hotel rooms, to dinner, etc. The Rolls is even given to dealers to take home to show their wives, or to salesmen making special calls. Combined with a well thought out publicity kit (includes five pages of effective suggestions, plus two sample news releases) the Rolls and it's unique cargo have resulted in a high volume of publicity, beginning with its sensational debut at the Ohio Hardware Show in Cleveland in early February. The Rolls was purchased shortly before, the transaction being shown above with Locke Sales Manager Jack Greene accepting the keys from the Rolls dealer.

However, support was far from unanimous. Unions, farm, and consumer groups argued that passage of a new federal fair trade bill would mean higher prices for consumers. They were backed up by the Justice Department and the Federal Trade Commission. The Justice Department said consumers would be hard hit by higher prices, but small business would not be helped because fair trade would become an "umbrella" for discounters and private brand distributors.

The Justice Department also questioned the constitutionality of the proposals because they would allegedly interfere with states rights. Both government agencies contended fair trade would create tremendous enforcement problems, would mean more federal interference in business, and would be inconsistent with antitrust laws and the "traditional American concept of free enterprise."

The Justice Department came up with its own survey, conducted in 1956 in eight non-fair trade cities on 132 rapid turnover fair trade items. It showed, the Department said, that an average of 119 of the items were available in each city and an average of 77 were sold below fair trade prices. Consumers could save from 7 to 32 per cent by buying in non-fair trade areas (an average saving of 27 per cent on the 77 items), according to the Department.

The fair trade measures face tough sledding in Congress, even their backers admit. Most experts agree that a measure may win approval of the House, but will not get past the Senate this year.

Minimum service charge taxable, new rule states

Federal excise taxes do apply to a so-called "service charge" that is added to the cost of a taxable article when it is purchased in less than a minimum volume, the Internal Revenue Service warns.

In a recent ruling (Rev. Rul. 59-87), the IRS points out that the service charge for labor and other costs of repacking less than the prescribed quantity is taxable, under laws applying the tax to all costs of packaging and containers.

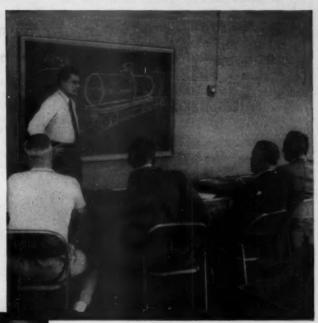
Only if the service charge, or a portion of it, can be clearly shown to be for extra costs of transportation, delivery, or insurance, can the charge be excluded from the taxable base of the items.

EAST, WEST, NORTH OR SOUTH-THE STORY'S ALWAYS THE SAME

"Cities Service has helped me build a \$5,000,000 volume in just 10 years"

Thermogas Company has expected and received the full cooperation of Cities Service since the start of the company in 1948. Inventory control . . . warehousing . . . bookkeeping . . . sales training and education are all areas in which Thermogas has looked to Cities Service for experience and guidance.

Right now, this distributor is in the midst of spending \$80,000 per year to conduct intensive courses for employees and customers in virtually every phase of LPG operation. Expert Cities Service instructors are used for many classes.





"I was in a jam but Cities Service pulled me out"

December 1, 1956, Loyd Hittle took over an LPG Distributorship. "On top of all the normal confusion, I found the storage tanks completely dry and customers clamoring for delivery." Hittle made a call to Cities Service and next morning he had his propane plus the assistance of a Cities Service technical representative.

Hittle Service is just one of the many LPG Distributors who have found Cities Service a valuable aid to business as well as a dependable source of

Call or write the Cities Service office nearest you for full information.

3435 Broadway Kansas City 11, Missouri

20 N. Wacker Drive Chicago 6, Illinois

701 Sherland Building South Bend 1, Indiana

500 Robert Street St. Paul 1, Minnesota 6611 Euclid Ave.

Cleveland 3, Ohio 7730 Carondelet Ave. Clayton 5, Missouri

626 E. Wisconsin Ave. Milwaukee 2, Wisconsin 1658 East Euclid

170 University Ave. Des Moines 13, Iowa Toronto 1, Canada



ASSOCIATIONS

Western LGA scores two industry firsts classroom service, safe driver programs

A brand new classroom service training program, the first of its kind in the U. S., is about to be launched by the Western Liquid Gas Association as the No. 1 activity of its forthcoming association year.

At Fresno (Calif.) City College, beginning with the September term, a course based upon the new LPGA Service Training Course will be made a part of the regular curriculum. Classes will be held two evenings each week, and each book in the series will be the textbook for an entire semester. Students will receive full college credit for this work.

Attendance of at least 20 persons has been guaranteed by the association, and the industry has agreed to furnish the demonstration equipment needed in the studies. Since the textbooks have been prepared for the eighth-grade level, no special training will be required, so any competent and qualified teacher will be able to teach the course.

As demand for the course can be generated, WLGA plans to broaden the program to include any area where at least 15 prospective students agree to participate. The association will supply an instructor from the ranks of local vocational school teachers to conduct one evening class per week. Under this plan, two 12-week semesters of training would be held each year. This program can be started immediately if demand warrants it. Costs will be split 50/50 between students and the association.

(Plans have been made to conduct similar courses in Pocatello and Boise, Idaho; Las Vegas and Reno, Nev.; and possibly in Washington and Oregon as well. These would be under LPGA sponsorship, coordinated by the same man who is organizing the California programs—A. L. Walters, combined WLPGA-LPGA executive in the area.)

WLGA has also scored another impressive "first"—the establishment of a Safe Driver Program,

which got under way April 1. This plan, sponsored by the National Safety Council, is ordinarily made available only to entire driver fleets in individual companies. This is the first time it has been extended to an association or to an entire state. Any member company of WLGA with from 1 to 65



A. L. Walters

drivers is eligible to participate under the association aegis at a flat rate of \$2.60 per driver. Standard rates for individual companies with 1 or 2 drivers are \$33.60 per man; for companies with 5 to 9 drivers, \$22 per man, so the association sponsorship will extend the benefits of the Green Cross plan to many small companies that otherwise could not afford to participate.

The California association recently wound up its first full association year as an LPGA affiliate. During that time, 50 new members were enrolled. Some noteworthy achievements made in the last 12 months:

The working out of new weights and measures and safety codes with state officials.

Payment of \$75,000 in insurance claims to members.

Publishing of information on what state inspectors look for when inspecting plants for safety regulation compliance, what bookkeeping records are necessary, and what audits are required by the state board of equalization.

Establishment of a public relations function through the efforts of the public relations committee, and the addition to the association staff of an experienced public relations man on a full-time basis.

Organization of a speakers' bureau.

Successful blocking of: restrictive insurance measures proposed by the state, an anti-LPG smear campaign started by the Sacramento Municipal Utility District, and a Los Angeles City Council ordinance to ban LPG-carrying trucks from the city's freeways.

Elimination of a discriminatory \$50 "inspections," fee which had been levied by Tulare county over a period of 12 years.

GAMA names Norman, hears optimistic reports

Edward A. Norman, president of Norman Products Co., Columbus, Ohio, was elected president of the Gas Appliance Manufacturers Association at the group's 24th annual meeting, held in early April in Bal Harbour, Fla. A highlight of the session was the optimistic outlook voiced by speakers addressing the 300 (a record) attending delegates, who produce 95 per cent of the nation's gas appliances and equipment.

Norman, who had been the association's first vice president, succeeds Clifford V. Coons, executive vice president of Rheem Manufacturing Co., New York.

Other new officers elected were: First Vice President Wendell C. Davis, president of Cribben & Sexton Co., Chicago, and Second Vice President William G. Hamilton Jr., president of American Meter Co., Philadelphia.

Re-elected as treasurer was Stanley H. Hobson, chairman of Geo. D. Roper Corp., Rockford, Ill.

Preparations for meeting keen competition expected in the sixties shared the spotlight with the present bright sales picture. Emphasis was particularly strong on promotion, product development, and upgrading in all product categories.

Norman estimated that manufacturers last year invested more than \$35 million in product development and improvement to keep up with demands of "a nation of super shoppers," and predicted that an equivalent amount is likely to be

... for a better Contrac

It takes year around buying for those extra profits on your winter gas sales. Take stock of your needs . . . then call Master for prices and delivery on storage tanks and transports. We're building them and selling them from Quincy and Dallas. Write, telephone or wire the nearest Master Plant.

CHEC

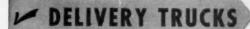
✓ STORAGE

Break the bonds of limited storage capacity with Master LPG Storage Vessels. We build to your specifications in ANY size. Full X-rayed seams assure absolute safety. Meets all code requirements. Send for Master Storage Folder.



TRANSPORTS

Dealers' choice MASTER transports of miracle light-weight T-1 Steel for BONUS payloads. Engineered and built to meet your specifications up through 10,000 water gallons. Fabricated to meet the latest codes. Fully X-rayed and sand blasted. Recessed fittings. Simplified plumbing system. UL Approved. Send for Master Transport Folder.



The "Time Saver" is a money saver for LPG operators—featuring a hose reel located in a side cabinet for simplified sidewalk delivery. The fire extinguisher is mounted in a recessed cabinet on the left side of the truck. Two cabinets at the rear carry extra fittings and valves. All fittings are recessed; all seams are 100% X-rayed. Available in capacities up to 2400 water gallons.







Quincy, Illinois Dellas, Texas

BAldwin 3-5014 Riverside 7-2441



MASTERPIECES OF STEEL FABRICATION











TRANSPORTS

TANK TRUCKS

DOMESTIC FILLING STATIONS FARM CARTS

spent this year on further upgrading. He urged GAMA members to join forces to make known the tremendous scope of the gas appliance and equipment industry, citing the many new and relatively unknown gas products as indications of the industry's opportunities for successful diversification and market expansion.

Coons said events of the first quarter of this year warranted a sharp upward revision of the industry's earlier forecast of '59 sales. He estimated that combined shipments of household, commercial, and industrial gas equipment will top last year's total by 15 per cent rather than the 9 per cent predicted

in December.

J. Theodore Wolfe, president of the American Gas Association and the Baltimore Gas & Electric Co., told the conventioners that the industry was well prepared to meet competitive threats but warned that "this is certainly no time to relax." He described the gas refrigeration, air conditioning, and incineration fields as "bright with promise."

Before assuming his new duties, Norman proposed the GAMA househeating divisions jointly sponsor an advertising and promotional campaign to increase sales of gas heating equipment and anticipate competitive activities. The Norman plan would aim its message of gas heat superiority directly at builders, architects, realtors, installers and plumbing and heating contractors. Details are to be worked out by a committee appointed for that purpose.

900 from five states at Southeastern meeting

Over 900 members and guests attended the Ninth Annual Convention and Trade Exhibition of the Southeastern District of the LPGA at Atlanta, Ga., April 1-3. South Carolina LPGA played host to fellow members from North Carolina, Alabama, Georgia, and Florida.

Among the business items was a resolution passed by the convention, opposing further expansion of the Rural Electrification Adminis-

tration.

The host association elected new officers at the meeting, naming as president Thomas E. Thornhill, secretary and assistant manager of Seaboard Gas Co., Charleston. He succeeds R. F. Ingleright. Other officers elected by the South Carolina group include Vice President

Charles I. Queen of Barnwell and Secretary-Treasurer H. B. Huckabee of Columbia.

The Georgia association also named officers, selecting Ed Taylor of Lithonia to succeed Dan W. Boone Jr. as president. Also elected were: Vice President Fred Lewis of Cartersville and Secretary-Treasurer Walter Hobbs of Montezuma.

Safety meets to repeat, win award for founder

Over 600 employees of Mississippi LPG companies are expected to attend the second annual LP-Gas Safety Conference series, to be held at six locations in the state during the last week of May and the first week of June.

Co-sponsored by Mississippi LPGA and the University of Mississippi, the one-day sessions are organized by Lewis Graeber, Marks, Miss., chairman of the association's

safety committee.

The first series of sessions, held last year, won Graeber the "dealer of the year" award at the association's annual convention in mid-April at Biloxi. An LPG dealer for over 20 years, Graeber has businesses located in five towns.



His outgoing President's report in hand, John Agbashian (right) of Fresno, Calif., is shown after handing over the reins of the Western Liquid Gas Association to the new president, Tom Mc-Gurn (left). Also from Fresno, McGurn is President of Cities Fuel Corp. Shown with them is R. J. Munzer, President of Petrolane Gas Service Inc., Long Beach, Calif., and vice president of LPGA. Also elected at the association's annual convention and trade show in San Francisco in April, were R. L. Bach, Long Beach, and Ben Tilden, Burbank, who were named vice president and secretary, respectively. More than 700 people attended.



Clifford Stapleton

Indiana LPGA elects prexy, holds controls schools

New President of the Indiana LPG Association is Clifford Stapleton of Unger & Stapleton Inc., New Castle, Ind. Elected at the group's annual convention and trade show in March, he succeeds Sherman McCoy.

In mid-March, the association, co-sponsored with the Bryant-Hedback Co., a scries of two-hour controls schools in six Indiana towns. Total attendance was 281.

Western Propane's Nyberg heads Chicago Institute

Charles E. Nyberg, of Western Propane Co. was recently elected to a one-year term as president of the Gas Institute of Greater Chicagoland.

Other officers named are: First Vice President H. A. Goodwin, Bastian-Blessing, Co.; Second Vice President Everett Wenzel, Cribben & Sexton Co.; Third Vice President A. W. Nepstad, Industrial Specialties Co.; and Secretary-Treasurer Jerome P. Happ, North Shore Gas Co.

Association Notes

Oklahoma LPGA invited presidents and secretaries from associations in near-by states to its midyear meeting, held in early April at Wagner. Featured speakers were specialists in business administration and law.

Minnesota LPGA attracted some 120 students from Minnesota, Wisconsin, Iowa, North Dakota and South Dakota to its three-day service school, offered in mid-March at the University of Minnesota in Minneapolis. Rather unusual was a special public relations class.



"LINDE helped us increase our business"

Says Irvin Etscorn, President, Big "3" Gas Company, Louisville, Ky.

"We've been buying cylinders from LINDE since 1949. As one of the largest distributors in the Midwest, we're in a position to compare cylinder quality—LINDE's are the best! We've never received a bad one. And by developing new kinds of cylinders and showing us where they can be used, LINDE helped us increase our business."

Find out for yourself. Any PREST-O-LITE cylinder will show you. It's built to last. One seam, not three for light weight and high strength. Footring designed, constructed, and coated to prevent rust. Every cylinder tested to twice the service pressure. And be sure to get the facts on how LINDE's Credit Plan keeps the cost below that of any other cylinder. You pay interest only on the unpaid balance. Write Linde Company, Division of Union Carbide Corporation, 30 East 42nd Street, New York 17, N. Y. In Canada: Linde Company, Division of Union Carbide Canada Limited.

"Linde." "Prest-O-Lite" and "Union Carbide" are registered trade marks of Union Carbide Corporation.

Kentucky LPGA's spring board meeting, which attracted more than 50 officers and members, was held at Paducah in mid-April. Important reports were those on a merit sysstem, an insurance program, and progress in carburetion.

Wisconsin LPGA held a one-day convention in early April at Stevens Point. On the agenda were proposed changes in the state's Weights & Measures Department rulings governing metering.

Ohio LPGA's annual Convention and Trade Show was in mid-March in Cincinnati and was attended by a record-breaking 225. A special feature of the three-day session was the K.I.O. Hour, a social event in which the Ohioans played host to LPG men from the neighboring states of Kentucky and Indiana.

Alabama LPGA is currently considering the merits of becoming an active member of the National Safety Council. Purpose of membership is to provide accident prevention information and assistance for association members.



San Francisco Mayor George Christopher (right) received delicious proof of LPG's ability to provide hot meals under "emergency" conditions during Western Liquid Gas Association's recent annual convention and trade show. Four range manufacturers served lunch to Christopher in a Union Square demonstration. Looking on is WLGA's immediate past president, John Agbashian. The event was dreamed up by WLGA's public relations man Dick Pollard.

CALENDAR

Coming events in the Industry

All associations are invited to send in dates of their forthcoming meetings for this calendar.

1959

- May 30-June 5-5th World Petroleum Congress-Coliseum, New York, N. Y.
- June 1, 3, 5—Mississippi LPGA Second Annual LP-Gas Safety Conference— Jackson (1), McComb (3), and Hattiesburg (5), Miss.
- June 3-5—Oklahoma LPGA Carburetion School—Oklahoma State University, Stillwater, Okla.
- June 7-8—Butane-Propane Institute of Louisiana Convention—Bellemont Motor Hotel, Baton Rouge, La.
- June 7-9—Northwest District LPGA Convention—Portland, Ore.
- June 7-9—Tennessee LPGA Annual Convention—Gatlinburg, Tenn.
- June 8-10—Missouri LPGA and Illinois LPGA Joint Convention and Trade Show—Known as the Mo-III L. P. Gas Exposition—Sheraton-Jefferson Hotel, St. Louis, Mo.
- June 14-16—Colorado LPGA Convention — Colorado Hotel, Glenwood Springs, Colo.
- June 14-16—Arkansas LPGA Annual Convention.
- June 14-16—Gas Industry's First National Public Relations Conference— Sponsored by the American Gas Association and the Independent Natural Gas Association of America—Edgewater Beach Hotel, Chicago, III.
- June 22-23—Minnesota LPGA Summer Convention — Madden Lodge, Gull Lake, Brainerd, Minn.
- June 24-26—Texas Butane Dealers Association Convention and L. P. Gas Market—Adolphus Hotel, Dallas, Texas.
- June 30-July 1—Conference for drivers in the L. P. Gas Industry—Purdue University, Lafayette, Ind.
- August 2-4—Kentucky LPGA Annual Convention and Trade Show—Kentucky Hotel, Louisville, Ky.
- August 2-4—Alabama LPGA Annual Convention—Birmingham, Ala.
- August 2-4—New Mexico LPGA Annual Convention & Trade Show—Albuquerque, N. M.

- August 3-5—Oklahoma L. P. Gas Service School—University of Oklahoma, Norman, Okla.
- August 9-14—L. P. Gas Service and Carburetion Conference — Sponsored by the Florida LPGA—University of Florida, Gainesville, Fla.
- August 16-18—Nevada, Idaho, Utah
 —Joint Convention and Trade Show—
 Holiday Hotel, Reno, Nev.
- August 17-19—Georgia and South Carolina LPGA joint mid-year meeting— Savannah, Ga.
- August 17-19—Ohio LPGA service school
 —Ohio State University, Columbus, O.
- September 11-13—Wisconsin LPGA Fall Convention—Egg Harbor, Wis.
- September 13-15—North Carolina LPGA Annual Meeting and Convention— Sir Walter Raleigh Hotel, Raleigh, N. C.
- September 17—Pennsylvania LPGA Convention—Cocoa Inn, Hershey, Pa.
- September 18-19—Florida LPGA Annual Convention — Golden Gate Hotel, Miami Beach, Fla.
- September 25-26—lowa LPGA Fall Convention—The New Inn, Lake Okoboji, Okoboji, Iowa.
- September 28-October 1 American Welding Society fall meeting—Sheraton-Cadillac Hotel, Detroit, Mich.
- October 4-6—Oklahoma LPGA Convention—Biltmore Hotel, Oklahoma City, Okla.
- October 5-7—American Gas Association 41st Annual Convention — Conrad Hilton Hotel, Chicago, Ill.
- October 8-9—California Natural Gasoline Association 34th Annual Fall Meeting—Huntington-Sheraton Hotel, Pasadena, Calif.
- October 12-14 Northeast Regional LPGA Convention and Trade Show —Sheraton-Park Hotel, Washington, D. C.

Make More Money With Mississippi Tank

Profit-Designed DELIVERY UNITS

Whatever your LP Gas delivery requirements may be, Mississippi Tank Company has a unit engineered to do the job efficiently and fast. Payload capacity, economy of operation and durability have been skillfully combined in each unit. Whether you make long or short hauls on highways or back roads, there's a Mississippi Tank delivery unit to give you years of high-profit, low-cost service.



TITAN, JR.

2600 water gallon capacity—weighs less than 23,000 lbs. loaded? The secret is exclusive Mississippi Tank design which insures perfect weight distribution and maximum loading. A 202-B steel construction, 72" inside diameter tank, fully X-rayed and sand blasted.



PAYMASTER TWIN

Streamlined and beautiful, the Paymaster is engineered to give low cost service on back roads or highways. Many low-cost options for high-profit operation. Available in 1200 to 2300 water gallon capacities.

All Mississippi Tank Delivery Units are fabricated according to latest ASME Code, and ICC Specifications.

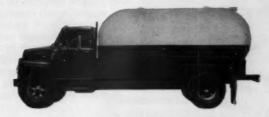


MISSISSIPPI TANK COMPANY

INCORPORATED
Hattiesburg, Miss. JUniper 3-0262

T-1 TITAN

Its extra capacity—3075 water gallons on a single 18,000-lb axle, enables the Titan to pay for itself in a matter of months. Lightweight T-1 steel construction, 76½" inside diameter, tank fully X-rayed and sand blasted.



ATLAS SINGLE BARREL DELIVERY

Quality designed and precisely balanced for maximum payload capacity at low cost. Finished with many deluxe features you'd expect to find only in higher-priced models. Capacities: 1500 to 2300 water gallons.



Mail coupon for literature on the latest in profit-designed equipment

MISSISSIPPI TANK COMPANY, INC.
Hattiesburg, Miss.

Please send literature on
—Single and Twin Barrel Delivery Units
—T-1 Steel Transports
—Domestic and Bulk Storage Tanks

NAME

COMPANY

CITY and STATE



IN PRODUCTS AND TRADE LITERATURE

For further information on items reviewed in this section use the convenient post-paid Readers' Service Cards on pages 85, 86



Portable cook stove operates on propane

Circle 1 on Readers' Service Card

A portable cook stove that can be used with any refillable propane cylinder is now manufactured by Home Gas Equipment Co. "Campmaster" is made of heavy aluminum so it is lightweight, won't rust. Operating costs are said to be 1/10 the cost of throw-away type fuel cans. Stove comes complete with two burners, folding windshield, 4 ft hose, regulator and a hand-tight coupling for easy attachment to any standard propane bottle. It weighs 9 lb.



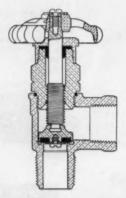
Truck meets requirements for LPG mobile home delivery

Circle 2 on Readers' Service Card Master Tank has designed a

Master Tank has designed a "Time Saver" truck to meet the requirements for propane delivery

.................

to mobile homes. A 900 gal. capacity tank is mounted on a Ford C-5-50 series tilt cab chassis. The truck is equipped with racks that hold six 100 lb cylinders and ten 20 lb cylinders. A Hannay hand-operated reel holds 50 ft of $\frac{3}{4}$ in filler hose, and 50 ft of $\frac{1}{2}$ in hose for vapor return. There is a 2 in, secondary filler for 2-way pumping.



Transfer valve for use with Rego 7572C, 7580C Chek-Loks

Circle 3 on Readers' Service Card

Bastian - Blessing's 7550 series transfer valve has been designed for use with the Rego Chek-Lok excess flow valves and multivalve units that employ Chek-Lok feature. Ideal as a shut-off valve for liquid transfer operations from domestic ASME systems, it has adequate capacity to enable Chek-Loks to slug shut to remove the shut-off valve after liquid evacuation. The Series has a ¾ in. NGT male inlet and a ¾ in. NPT female outlet.



Integral PTO and hydraulic pump available in two sizes

Circle 4 on Readers' Service Card

An integral power take-off and hydraulic pump unit for fuel delivery systems is being marketed by Clifford B. Hannay. Available in two sizes, the unit simplifies installation of hydraulic pumping systems and reduces installation cost. Mounting saddle, jack shaft and universal joints are completely eliminated. The unit combines pump and power take-off.



Unvented gas heater finished in porcelain enamel

Circle 5 on Readers' Service Card

A Warm Morning "Del Ray" series of unvented gas heaters with both cabinet and combustion surfaces finished in porcelain enamel,

FOR MORE **INFORMATION**

about New Products in this Issue

Each New Product or Trade Literature item reviewed in this issue is numbered. Circle the corresponding numbers on the Readers' Service Card; then PRINT your name, title, company and address plainly and drop the card in the mails (no postage is needed).

PERMIT NO. 36 FIRST CLASS

New York, N. Y.



NEW YORK 14, N. Y. P. O. BOX 106
VILLAGE STATION

ADDRESS CITY & STATE

June, 1959

PARE Readers' Service Dept.

Circle the number of the item requested

USE THESE

POSTAGE FREE

POST CARDS

No postage necessary if mailed in the United States

AR

EPLY

2 S

S ш

SIN

80

POSTAGE WILL BE PAID BY

BUTANE PROPANER EADERS' DEPARTMENT

					`	
abou	e sei	nd me	e furt	her in	forma	tion
	t the	item	s circl	ed be	low .	
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29		31	32	33	34	35
36	37	38	39	40	41	42
43	44	45	46	47	48	49
50	51	52		54	55	56
57	58	59	60	61	62	63
• Ple	ase f	Print				
NAME_						
TITLE						
COMPA	NY					
ADDRES	222					
CITY &	STATE_					
June,			• Vo	id afte	er 90	days
					9 11 7 15	
BUTAI	IE-PRI	DPANE aws	DE	AD	ERS	3
SER	VIC					
		-	DEP	AR	LWE	N
Plans						
	ie se	nd m	e furt	her in	formo	tion
abou	se se	nd me	e furt	her in	forma	ition
abou 1	se se t the	nd me item	e furti	her in ed be	formation .	ition
abou 1 8	se se the the	item	e furti s circl 4	her in ed be 5 12	formation . 6 13	7 14
abou 1 8 15	2 9	and meditem:	furtiss circle 4 11 18	her in ed be 5 12 19	formolow. 6 13 20	7 14 21
abou 1 8 15 22	2 9 16 23	3 10 17 24	4 11 18 25	her in ed be 5 12 19 26	formolow . 6 13 20 27	7 14 21 28
1 8 15 22 29	2 9 16 23 30	3 10 17 24	4 11 18 25 32	5 12 19 26 33	formo low . 6 13 20 27 34	7 14 21 28 35
1 8 15 22 29 36	2 9 16 23 30 37	3 10 17 24 31 38	4 11 18 25 32 39	5 12 19 26 33 40	formo low . 6 13 20 27 34 41	7 14 21 28 35 42
abou 1 8 15 22 29 36 43	2 9 16 23 30 37	3 10 17 24 31 38 45	4 11 18 25 32 39 46	her in ed be 5 12 19 26 33 40 47	formolow . 6 13 20 27 34 41 48	7 14 21 28 35 42 49
1 8 15 22 29 36 43 50	2 9 16 23 30 37 44 51	3 10 17 24 31 38 45 52	4 11 18 25 32 39 46 53	her in ed be 5 12 19 26 33 40 47 54	formolow. 6 13 20 27 34 41 48 55	7 14 21 28 35 42 49 56
1 8 15 22 29 36 43 50 57	2 9 16 23 30 37 44 51 58	3 10 17 24 31 38 45 52	4 11 18 25 32 39 46 53 60	her in ed be 5 12 19 26 33 40 47 54	formolow . 6 13 20 27 34 41 48	7 14 21 28 35 42 49 56
1 8 15 22 29 36 43 50 57 • Ple	2 9 16 23 30 37 44 51 58	3 10 17 24 31 38 45 52 59	4 11 18 25 32 39 46 53 60	her in ed be 5 12 19 26 33 40 47 54 61	formolow. 6 13 20 27 34 41 48 55	7 14 21 28 35 42 49 56
1 8 15 22 29 36 43 50 57 • Ple	2 9 16 23 30 37 44 51 58	3 10 17 24 31 38 45 52 59	4 11 18 25 32 39 46 53 60	her in ed be 5 12 19 26 33 40 47 54 61	formolow. 6 13 20 27 34 41 48 55	7 14 21 28 35 42 49 56

Void after 90 days

New York, N. Y. PERMIT NO. 36 FIRST CLASS

RD

A

EPLY

0

S

S

BUSINE

New York, N. Y. PERMIT NO. 36 FIRST CLASS

ARD

EPLY

0

S

S

BUSINE

No postage necessary if mailed in the United States

No postage necessary if mailed in the United States

NEW YORK 14, N. Y.

OPANE Readers' Service Dept.

VILLAGE STATION

POSTAGE WILL BE PAID BY

NEW YORK 14. N. Y.

-PROPANE Readers' Service Dept.

VILLAGE STATION

P. O. BOX 106

POSTAGE WILL BE PAID BY

READERS' DEPARTMENT

FOR MORE

INFORMATION

about New Products

Each New Product or Trade Literature item reviewed in this issue is numbered. Circle the corresponding numbers on the Readers' Service Card; then PRINT your name, title, company and address plainly and drop the card in the

in this Issue

mails (no postage is needed).

Please send me further information about the items circled below

3 4 5 7 1 2 6 8 9 10 11 12 13 14 17 18 19 20 21 15 16 26 27 28 22 23 24 25 29 33 34 35 30 31 32 41 42 36 37 38 39 40 49 48 43 44 45 46 47 55 56 50 51 52 53 54 57 58 62 63 59 60 61

Please Print

TITLE

COMPANY

ADDRESS. CITY & STATE

 Void after 90 days June, 1959

USE THESE POSTAGE FREE **POST CARDS**

Circle the number of the item requested is offered by Locke Stove. The porcelain finish carries a 10-year guarantee against rust. The series is offered in three models: 922—22,000 Btu input; 926—26,000 Btu input and 935—35,000 Btu input. All models are AGA approved.



8 cu ft gas refrigerator available in June

Circle 6 on Readers' Service Card

The 8 cu ft Kirk gas refrigerator will be ready for shipment in June. It will have a full width freezer. vegetable crisper, and a unit adaptable for all types of gas. The freezing unit will be sealed absorptiontype system with no moving parts and will carry a 10-year guarantee. A 10.2 cu ft model was approved by the AGA Laboratories in December 1958. In addition to the 10.2 and 8 cu ft models, Kirk plans: a 51/2 cut ft refrigerator, a 14 cu ft refrigerator-freezer, a 10 cu ft home freezer, and a 6 case beverage cooler, all gas operated.

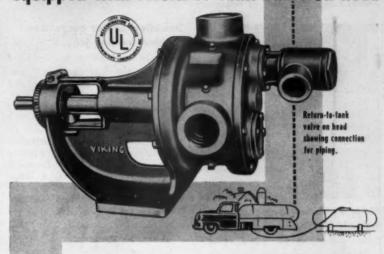


New method for installing LPG carburetion systems

Circle 7 on Readers' Service Card

Beam Products has perfected an installation method for LPG carburetion systems. The Beam Water-Runner is installed between the thermostat housing and the engine head. This eliminates one long wa-

CUT DELIVERY TIME with the VIKING L-P GAS TRUCK PUMP equipped with return-to-tank valve on head



You will get full, maximum capacity when using the Viking LP-Gas truck pump . . . equipped with return-to-tank valve on head . . . with full size piping . . . and with excess flow check valve.

Take a tip from the man using this equipment. He is operating a profit-making truck.

You'll have a pump that will keep delivering at a profit. It is constructed in Viking's original "gear-within-a-gear" principle that is proved for long life. And now, for still longer life, it is equipped with automatic internal pressure lubrication — an exclusive, *patented feature.

*PATENT PENDING

For information, send today for Catalog HB.



VIKING PUMP COMPANY

Cedar Falls Towa, U. S. A. In Canada, It's "ROTO-KING" Pumps SEE OUR FILE IN BUTANE PROPANE CATALOG

GENERAL L-P GAS TANKS

20 lb .- 40 lb .- 60 lb .- 100 lb . Cylinders

Complete Line of Accessories for Single or Double Hook-ups . . . Regulators—Valves—Racks—etc. Everything that is needed for complete Bottle Gas Installation.

* Send for full details today.

General Processing Corporation

Main Office and Factory: Quincy, Michigan

West Coast Division:

10854 E. Central Ave., El Monte, California



For further information on these products use Readers' Service Cards on pages 85, 86

ter hose and the cumbersome mounting plate used in other systems. A complete Beam installation includes a vaporizer-regulator in one of several models, the new Filterlock (a combination filter and solenoid valve) and the new Microvac vacuum safety switch. Various installations are available for different makes and sizes of engines.



Ridge Tool's new wrenches multiply leverage

Circle 8 on Readers' Service Card

Ridgid's new wrenches work with compounded leverage. Pressure on the handle is doubled as the adjustable hook jaw turns the pipe in one direction. The offset chain vise head grips the fitting and exerts an equal pressure in the opposite direction. They will tighten or loosen right or left hand threads with the pipe on either side of the fitting, are available in four sizes for 2 to 8 in, pipe.



Drop-in surface units offered with top controls

Circle 9 on Readers' Service Card

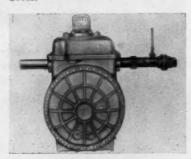
Eight four-burner drop-in surface cooking units and a Rotis-O-Grill cooking center have been announced by Roper. They are available in either "cluster" or "staggered" cooking top arrangements. Burner controls are on the cooking top, eliminating need for a special cut-out for the front control panel. This simplifies and speeds installation, reducing costs. Burner boxes are formed from one piece of steel



Downflow heater overcomes problem heating jobs

Circle 10 on Readers' Service Card

Reznor has introduced a downflow direct-fired gas heater for heating jobs in buildings with high ceilings or obstructions. The direct-fired equipment is available in four basic sizes from 300,000 Btuh to 600,000 Btuh. Units can be installed in multiples to provide even greater capacities, consist of duct furnaces with automatic controls, a large propeller-type fan assembly, and screened, bell-mouthed intake boots.



High pressure critical flow prover tests meters

Circle 11 on Readers' Service Card

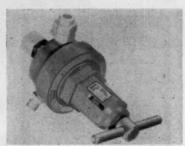
A critical flow prover with maximum working pressure of 1000 lb per sq in. has just been introduced by American Meter. Designed for field testing of positive displacement meters at operating pressures of 15 psi or more, it is equipped with five individually calibrated orifices and a thermometer. Available in 2-in. size for gas capacities from 250 to 6000 cfh.

Honeywell offers self-powered control, valve, and manifold

Circle 12 on Readers' Service Card

Honeywell's VS8002 Powerpile (self-powered) Valve Operator is designed to fit into a separate valve body and is also used to make up a complete Powerpile Manifold. The VS8187 valve—one inch lower than previous models—is ideally suited to all small fur-

nace installations. The VS8167 is a complete preassembled manifold unit in a casting less than $5\frac{1}{2}$ in. long. It features complete automatic shutoff.



Industrial gas regulators have no gauges

Circle 13 on Readers' Service Card

A line of industrial gas regulators without gauges has been introduced by Linde. They are designed for use with oxygen (illustrated) acetylene or propane on cylinders or manifolds. Known as the R-552 (propane), this large-capacity, single-stage regulator has stemtype valves and an absolute minimum of exposed parts to eliminate maintenance and assure long life.



Electronic flow measuring unit monitors gas or liquid flow

Circle 14 on Readers' Service Card

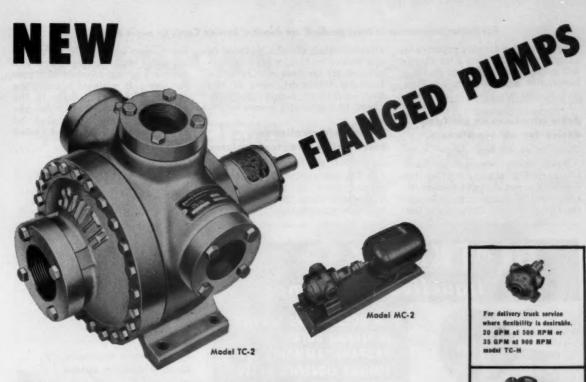
Gas or liquid flow is monitored or controlled by Computers Inc. electronic flow measuring system. The system is composed of transducers to measure pressure and temperature, a computer, integrator, and counter. Accumulated volume is registered on a mechanical counter, and, optionally, on a strip chart. Differential and static pressure input is 4 to 100 per cent for 100 per cent of pressure. Maximum working pressure is dependent on transducers only.

Scotch marine boiler burner for problem installations

Circle 15 on Readers' Service Card

A "Turbo-Flame" burner for scotch marine boilers where there is a known or possible back pres-

NEW



Save Installation Costs

Smith Pumps, known for superior design and lasting qualities, have been available for some time with STEEL flanges at end and side ports as optional equipment on these models: TC-2, TC-3, MC-2, MC-3; and as standard equipment on these models: ATC-2R, ATC-2L, ATC-3R, ATC-3L. This saves the cost of unions or extra flanges in the piping, simplifies installation and removal of pump.

Flanges are made of STEEL. Either threading or welding types available—specify which, at time of order.

Designed specifically for SAFETY, LONG LIFE, and EASE OF INSTALLATION, Smith Flanges offer valuable features not usually found in competitive units.

ened by heat treatment. No need for special wrenches as with socket-head bolts. Heattreated belts will not have heads deformed even if adjustable crescent wrenches are used. Semi-permanent O-ring type gaskets assure safe, leak-proof service for years, can nor-mally be re-used if necessary.

applications.

There is a SMITH PUMP for every LPG requirement: truck and bulk-plant units for small, medium, and large-volume transfer work, combination pumps, high-capacity heavy-duty pumps, and special models.

Flanges are made of STEEL, not cast iron or ductile iron. Cannot crack even on tough

• Flanges available in either threading or welding types. (The only pumps with welding

• Flange bolts have hexagon heads, are tough-

PHONE: RYan 1-2293 or RYan 1-2691

RECISION PRODUCTS COMPANY 1135 Mission Street, South Pasadena, California

Southeastern Distributor: Pond-Johnston Inc. Warehouses in Mobile, Ala.; Jacksonville, Fla.; Jackson, Miss. Western States Distributor: Teaco Products, Inc., 3920 West Burbank Blvd., Burbank, California.



For delivery truck service where flexibility is desirable. 20 GPM at 500 RPM or 35 GPM at 900 RPM model TC-H



Flanges Available



For "high flow" delivery truck service 109 GPM model TC-3 Flanges Available



automatic transmission 50 GPM model ATC-2 180 GPM model ATC-3



Will fill all small tanks Will fill all small tanks as fast as any larger pump.
100-lb, cyls. in 4 minutes or less,
20-lb, cyls. in 1 minute or less,
fork lift tanks no problem.
10 GPM models EC-I, EG-I,
MC-I, and GC-I.
15 GPM model EC-H,



For small volume transfer work, 20 GPM model MC-1044 35 GPM model MC-1044H



For medium volume transfer. 50 GPM model MC-2 er MC-2Q (higher press quiet running)



100 GPM medel MC-3 Flanges Available



For high capacity leading 150 GPM medel MC-4

sure or positive furnace pressure is announced by Mettler. Five standard models are included in the line, ranging in capacity from 1 million to 5 million Btu.

Arkla introduces air purifying device for air conditioners

Circle 16 on Readers' Service Card

Arkla announces an ultraviolet air purifying attachment for its Sun Valley gas air conditioners. It substantially reduces both bacteria and home odors present in the circulating air stream. Mounted in the blower section, where the circulated air receives maximum ultraviolet treatment, each of the two sterilizing lamps consumes about 15 watts of current.

Trailer refrigeration unit holds below-zero temperatures

Circle 17 on Readers' Service Card

A 7½ ton engine-driven refrigeration unit is introduced by Transicold Corp. Model 220 can maintain temperatures of 15 deg.

below zero indefinitely no matter what the outside temperature. The complete set-up consists of a condensing unit mounted beneath the trailer and an evaporator in the nose of the van. Power for the condensing unit is supplied by a 4-cylinder, 31-hp water-cooled Hercules LPG engine.



New furnace line features summer cooling option

Circle 18 on Readers' Service Card

Stewart-Warner's "Professional" line can be provided immediately with summer cooling equipment, or the equipment can be added later. The furnaces are available in basement, vertical and counterflow models, all approved by AGA. The manufacturer says a heavy-gauge steel heat exchanger helps account for its economical performance.



Console gas circulators priced for replacement market

Circle 19 on Readers' Service Card

A series of Brilliant Fire vented console gas circulators is introduced by Ohio Foundry. The room heaters are AGA approved at 15,000, 20,000 and 30,000 Btu per hour input on city or L. P. gases. Automatic controls are available for all models, and there is a blower accessory for the 30,000 Btu size. Priced for the replacement market, they retail at \$39.95 to \$69.95.

BLACKMER liquefied gas pumps



for OUTSTANDING SERVICE in handling BUTANE, PROPANE, AMMONIA and SIMILAR LIQUEFIED GASES

OUTSTANDING DESIGN FEATURES

These features account for long life in service and low maintenance costs experienced by users of Blackmer Liquefied Gas Pumps:

HEAVY DUTY ANTI-FRICTION
BEARINGS located on both sides
of the rotor and completely isolated from the pumpage.

CARTRIDGE-TYPE MECHANI-CAL SEALS on both sides of the rotor to control shaft leakage and protect bearings from the pumpage.

SLIDING VANES, which are "self-adjusting for wear," maintain high volumetric efficiency over unusually long periods of service.

CYLINDER LINERS which can be replaced after severe service to restore pump efficiency.

Each pump is tested before shipment to 1250 lbs. hydrostatic and 300 lbs. gas pressure.



PERFORMANCE PROVEN

Blackmer Pumps have earned broad customer preference through their excellent performance with records of handling millions of gallons of liquefied gases at amazingly low operating and maintenance costs.

WRITE FOR BULLETIN 500



"liquid materials handling"[®] equipment

BLACKMER

BLACKMER PUMP COMPANY, GRAND RAPIDS 9, MICHIGAN

See Yellow pages for your local sales representative

AMERICAN **ALUMINUMCASE AL-110-LPG METERS**



CUT COSTS - compact, light weight, aluminum alloy die-cast meter reduces shipping and handling costs...weighs less than 17 pounds.

BUILD LOADS - AL-110-LPG meters give your customers "utility-type service"... build the confidence that helps you sell more gas and gas appliances. Ideal for medium-sized homes with space heating and for small commercial loads.

MEASURE ACCURATELY - from pilot to full capacity loads. Precision engineered design includes grommet seals, self-lubricating bearings, plastic index box and reinforced flag rods. Bellows-type molded Duramic diaphragms designed to meet the requirements of LP-Gas services.

Rated capacity 110 cfh propane at 1/2-inch w.c. dif-ferential—5 psi working pressure. Available with 3/8, 1/2 or 3/4-inch F.P.T. connections. Ask for Bulletin 307.



General Offices: Philadelphia 16, Pa. Sales Offices in Principal Cities



NEW!

CHANGES for Every Enterprise Styleline Range Off-n-On in Minutes

Only ENTERPRISE offers this quick-changing backguard insert! In just a few moments, you can show customers one range with 6 different backguards—in their choice of Decorama colors. Every Enterprise Stylatine Ges Range you stock means 6 choices for your customers!

In just minutes, you can change backguard inserts in smart colors designed to match kitchens and electric appliances.

Let Our Enterprising Salesmen Show You

PHILLIPS & BUTTORFF CORPORATION

NASHVILLE, TENNESSEE

IN OUR 100th YEAR



Gas wall furnace installs easily, saves space

Circle 20 on Readers' Service Card
Quick, inexpensive installation in
or against the wall makes the DuoTherm gas wall furnace ideal for
homes or offices where space is at a
premium. Motor Wheel Corp.'s furnace features counterflow circulation and completely automatic operation. Central heating comfort
without expensive ducts is made
possible by a counterflow blower
system that keeps warm air moving
throughout the home. Two heating
capacities are available: 50,000 Btu
and 30,000 Btu input.

New 40-gal. short water heater offered by Pennsylvania Range Circle 21 on Readers' Service Card

Pennsylvania Range announces the Bradford 40-gal. short, standard series "B", glass-lined gas water heater. Overall height to top of vent, 59 13/16 in.; width, 20 in. L. P. gas recovery is 25.2 at 100 deg. F.

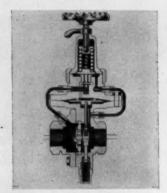


Excess flow and back pressure check valves available

Circle 22 on Readers' Service Card
Types F106 and F107 2-in. excess
flow check valves for L. P. gas service are announced by Fisher.

These are intended for large stor-

age containers and transport facilities. Also announced are the company's 2-in. Type G102 and 3-in. Type G103 back pressure check valves which permit flow of liquid or vapor in one direction only. They may also be used on a container connection for incoming flow.



OPW-Jordan redesigns piloted pressure regulator

Circle 23 on Readers' Service Card

OPW-Jordan has redesigned its ½-2 in, size piloted pressure regulator to improve performance by providing maximum maintenance, tight shut-off, and more accurate regulation. Suitable for pressures to 250 psi wsp and temperatures to 450 deg. F. Available from stock in bronze, cast iron, and ductile iron.





Built-in oven has 18,000 Btu burner and a giant broiler

Circle 24 on Readers' Service Card

Preway's Model 1719 gas Wall-chef built-in oven features an over-sized oven with an 18,000 Btu burner and a giant broiler compartment. It is a completely automatic unit. The oven also has a built-in rotisserie. Available in four decorator colors, it is also produced in stainless steel and provincial copper. It is 40% in. high, 221% in. wide and 24% in. deep.

TRADE LITERATURE

Condulets bulletin

Circle 25 on Readers' Service Card

"Condulets for Corrosive Locations" is the title of a 16-page bulletin by Crouse-Hinds. Corrosion-resistant properties of a variety of metals and finishes used in Crouse-Hinds condulets are described with charts showing the applications of each. Listings of Plast-A-Coat condulets for hazardous and nonhazardous locations are included.

ABS plastic Rigid pipe data

Circle 26 on Readers' Service Card

"Questions and Answers about Rigid Plastic Pipe made of ABS Plastics" is the title of a new folder by Marbon Chemical division. It provides basic performance and installation facts, lists benefits offered by ABS pipe.

"Good Dealers Pay Off" booklet

Circle 27 on Readers' Service Card

Cities Service's complete guide to building a sound petroleum dealer organization is offered in the new booklet, "Good Dealers Pay Off." It includes chapters on conducting meetings and conferences, offering managerial assistance and guidance, and working closely with dealers.

How to promote literature

Circle 28 on Readers' Service Card

Twelve ways to promote gas appliances and service are shown in Handy Flame Bulletin No. 19. It also lists the 72 gas companies and associations in 33 states and Canada that use the Handy Flame figure in advertising, sales promotion and public relations.

Kellogg-American history

Circle 29 on Readers' Service Card

A brief history and product resume of Kellogg-American is available. The Kellogg-American air compressor products line of the American Brake Shoe Co. was acquired by Scaife Co., a division of Wilson Brothers.

Liquid level, flow control data

Circle 30 on Readers' Service Card

Information on how to provide operating and safety controls for a wide variety of jobs involving liquid level and liquid flow is contained in a bulletin published by McDonnell & Miller. Full engineering information is given for each job, complete with schematic drawings to show typical hook-up.

Automatic valve wall chart

Circle 31 on Readers' Service Card
An automatic valve wall chart is available from A. W. Cash. It features ready reference data on the company's varied line of hydronic heating controls, relief valves, pressure regulators, and safety devices. The chart is standard file folder size and is scored for easy folding.

Slide-chart booklet

Circle 32 on Readers' Service Card
Perrygraf, designers and manufacturers of slide charts, offers a
32-page booklet, in full color, "14
Tested Ways to Build Sales and Cut
Sales Costs." It is a basic analysis
of how slide-charts can build sales
and cut selling costs. Each of the
methods is illustrated with specific
examples, several case histories, and
testimonials.





CLIFFORD B. HANNAY & SON, INC., WESTERLO, NEW YORK





rust solvent

NEW by SPATZ ALUMINUM PAINT

THAT CUTS
MAINTENANCE
COSTS OF BULK
STORAGE TANKS

AMAZING "RUST STOPPING"

"STRONTIUM CHROMATE"



- Even Resists Tarnishing from Sait Spray.
- Remains Brighter TWICE as long as ordinary Aluminum Paints.
- Sold throughout the Nation at Factory Wholesale Prices.

FREE! A guide to better pointing especially for the "LP" Gas industry. Write for yours today.



PAINT INDUSTRIES INC. 5237 Manchester Ave. 5t. Louis (10), Mo.



THE TRADE

RICHARD S. REYNOLDS JR. was elected chairman of the board of directors of Robertshaw-Fulton Controls Co. replacing John A. ROBERTSHAW, who will serve as vice chairman of the board until his retirement June 30. John H. KREY was elected a member of the firm's executive committee. Reynolds is president of Reynolds Metals Co.

W. M. HOLLINGSWORTH, manager of special products and services for Temco Inc., has been promoted to the newly created position of assistant to the president.

HAROLD E. SWEATT is now eastern district manager for the Metalbestos division of the William Wallace Co. ALLEN A. PUTT, formerly eastern district manager, was appointed special representative for the company with headquarters in Washington, D. C.

DON RYAN has been appointed sales engineer for Selwyn-Pacific Co. He will devote most of his time to furthering Sel-Pac's educational programs for LPG dealers and distributors.

A. L. MITCHELL, president of White Products Corp., Middleville, Mich., has been named vice president of Lamb Industries Inc., the parent corporation.

WILLIAM M. CONNOR, assistant to the vice president of Rockwell Manufacturing Co.'s Meter & Valve division, was promoted to general manager of the Statesboro, Ga., plant. Also announced is the transfer of SAMUEL W. BROWN, Statesboro general manager, to the Uniontown, Pa., plant as assistant general manager. MICHAEL P. GROOM has been named branch manager of the new El Paso sales office and JOHN R. APPLEGATE branch manager of the division's Detroit sales office.

J. R. Jamieson is now chief field engineer for Minneapolis-Honeywell Regulator Co.'s Temperature Controls group. He succeeds ED Myck, who has been transferred to the company's Frankfurt, Germany, plant to set up and direct activities of a new engineering department. J. ROBERT PAULINE, formerly vice president in charge of operations for the Kellogg-American division of the American Brake Shoe Co., was named vice president of Scaife Co. The Kellogg-American air compressor products line was acquired by Scaife from American Shoe, February 9.

KEITH T. DAVIS has been named manager of the new gas air conditioning equipment being produced by Bryant Manufacturing Co. Assistant manager is EARL T. RICHARDS JR. HOWARD J. BERKEL became director of public relations, but will continue to head the personnel division. WALTER R. LEANDER is the new product manager for gas furnaces with headquarters in Indianapolis, Ind.

BILL IRWIN was recently appointed shop superintendent for North Texas Tank Co. and John Mase joined the firm's engineering department. Irwin has been with Fritz W. Glitz & Son, Dallas Tank, Carrier Corp., and A. O. Smith. Mase formerly was district engineer for Shoreline Petroleum Co.

R. C. FREDERICK has been named senior vice president of Texas Natural Gasoline Corp. He was previously associated with Gulf Oil Corp. for 31 years.

V. H. SWEARINGEN is promoted to supervisor of Sales Service of the Permaglas division of the A. O. Smith Corp. He joined the company in 1954 and has been associated with market research as sales analyst and supervisor.

JIM WALL is Trinity Steel Co.'s new director of Finance and Control. Before joining Trinity in December 1958, he had been employed as a consultant with a national accounting firm.

JAMES L. MORGAN, JR. and CHARLES POLADIAN have been named regional managers for Maytag Co. Morgan will serve dealers in northeastern Missouri and will headquarter at Poplar Bluff, Mo. Poladian will serve central New York dealers, with headquarters in Syracuse, N. Y.



Irrigation builds big load



for carburetion specialist

T'S an axiom in the LPG business that a long irrigating season minimizes standby charges, making electricity tough competition for this load. That this is not necessarily so has been proved by the success of a relatively new and small dealership in Bakersfield, Calif.

The local outlet of Globe Gas Corp., this operation is managed by long-time LPG man Bill Herndon. In 18 mouths, he has established a successful, growing business by concentrating most of his efforts on power applications — and one of his best loads is irrigation.

Herndon's most steady load is from farm tractors, which operate over a long season. Irrigation is more seasonal, but in recent

On the H. O. Moore ranch, a single LPGburning Farmall "M" tractor provides irrigation for 40 acres.



The H. O. Moore ranch uses a power take-off from a Farmall "M" tractor to pump through a quarter mile of pipe. The rig runs four hours at a setting, and is completely unattended. The LPG tank which supplies it is mounted on a wagon (not shown).

drought years, that season has been stretching. Actually, the two loads overlap in many instances, since a good deal of pumping is done with tractor power takeoffs.

As Herndon stepped into Globe's Bakersfield operation in December 1957, he noted that row-type irrigation has always been an integral part of farming in the southern reaches of the San Joaquin Valley, California's famed agricultural area. (Bakersfield is in the southern tip of the valley.) While the region is arid, it produces a large amount of cotton, potatoes, alfalfa, and other basic crops.

Well pumping with electricity had plenty of supporters, for power is relatively cheap in the valley. Wells are deep, power requirements are high, the pumping season is long, and stand-by rates are not always an important factor, so the charges are, accordingly, on a low rate basis.

However, row-type irrigation had been yielding some of its supporters to sprinkling, an almost universal trend. In the San Joaquin Valley, this movement received an extra nudge from an unlikely agency—one of California's most famous earthquakes.

In 1952, the Tehachapi quake jarred the lower valley, buckling ground, changing land contours, and snapping underground piping. Many farmers who were using underground-fed row irrigation systems were thus suddenly encouraged to hook up portable aluminum piping systems directly to the wells and carry the water above ground. Where land contours had changed, sprinklers could be installed, eliminating the necessity of leveling and restoring the furrowed profiles to their previous condition.

However, it takes more than an earthquake to start a stampede to sprinkling. Irrigation is an expensive part of farming, and the decision as to which way to irrigate is dictated strictly by dollars and cents.

A sprinkling system is costly, according to Herndon, who has been close to the picture for several years. He estimates that a system for a 400-acre ranch would approximate \$50,000 and many of the smaller farms haven't that kind of capital.

On the other hand sprinkling does do a far superior job, as professional irrigation engineers agree. Coverage is increased substantially, in some cases almost doubled. One engineer conservatively estimates it saves one-third

of the water—an important consideration both from cost and conservation standpoints. It also gives more uniform coverage and enhances crop yield.

Further, as already pointed out, the land need not be carefully leveled and contoured for proper circulation of the water. Labor is eliminated, except for moving the pipe to a new location. With row irrigation, on the other hand, constant attendance is needed to see that the water flow is at the proper level and that distribution is as even as possible.

There is no "tail water" to worry about, either. In row systems, the water which collects at the low end of a field must either be collected in a sump and recirculated, or written off. In the latter case, a good deal of water may be lost—and water is not cheap.

Many of the smaller farms in the Bakersfield area cannot afford the complete conversion to a sprinkling system but do employ it as a pre-irrigation device. They rent systems from local firms for short periods and use sprinkling to get the crop started. After a short period of sprinkling—perhaps 30 days—they dismantle the system and turn to row irrigation.

Herndon estimates that in the area he serves, 80 per cent of the 200-acre-and-over farms pre-irrigate with sprinklers. Twenty per cent of them use sprinklers right through the irrigating season.

Sprinkling offers a good load for the LPG dealer because extra power is needed at the system headers to boost water through the pipes and sprinkler heads. Electricity is ill-equipped to do this job because electric equipment is immobile, and systems must be frequently moved. Without switch-gear, which is expensive, electricity can operate at only one pre-set speed, whereas booster power must be flexible. It is also subject to interruptions that are beyond the control of the farmer.

The disadvantages of gasoline engines for prolonged low-throttle operation are well known. Diesels are expensive and must be operated at a very high load factor to pay off.

LPG, therefore, is a natural for

booster power. It's easily portable, and carries its own source of supply-a 250 or 500 gal. tank mounted on a "trap wagon," a twoor four-wheeled trailer which can be pulled about the farm with ease. A skid tank may be used for larger installations. There's no danger of pilferage as with gasoline and this, says Herndon, is highly important, since the equipment works unattended most of the time. Also, it operates at quarter-throttle without complaining and doesn't heat up, carbon up, or suffer from crankcase dilution.

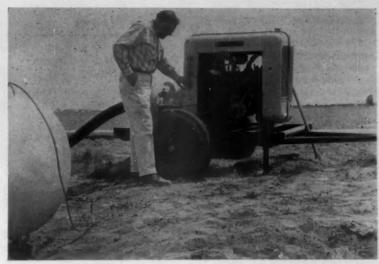
Both skid-mounted LPG engines and tractor power takeoffs are used. Herndon believes there's something to be said for each. Power takeoffs have built-in mobility, and the tractor does double duty, eliminating the investment in an additional power source. However, this ties up for long hours a piece of equipment that might be used elsewhere, and possibly other machinery which is useless as long as the tractor is being used as a stationary power source.

On the other hand, a farmer is more likely to use LPG than gasoline for irrigation pumping, so if he wants a double-duty engine, he'll probably pick a propane model. This gives the dealer a full tractor load rather than a more seasonal irrigation load.

Either way, the load is good. Since the majority of installations are for pre-irrigation only, they are in use about 30 days over a six week period in spring. On the other hand, one large ranch which uses sprinklers exclusively, irrigates from about March through August. Another, with several stationary engines, used 900 gal. in six days.

Per-engine usage runs between 3½ and 4 gal. per hour, depending upon throttle setting and engine model. Some engines run virtually day and night during the peak of the watering season.

Crop coverage off a single booster engine varies from farm to farm and crop to crop. At the H. O. Moore ranch, a single Farmall "M" with a J&S carburetor feeds a 4-in. discharge leading into a 2-in. lateral approximately one-quarter-mile long. Moving his equipment once every four hours,



At the Hamilton ranch, Globe Gas manager Bill Herndon inspects a Fairbonks-Morse Red Seal rig, which burns propone. It delivers 880 gpm at 75 lb, covering 7.2 acres in a six-hour watering period.



Turning on the water to pre-irrigate cotton. Once the crop has become established Hamilton turns to row irrigation.

Irrigation engineers move the lightweight aluminum pipe into place preparatory to hooking up the system.



Moore irrigates 40 acres with the one unit.

The Hamilton ranch in the same area pre-irrigates its cotton with sprinklers. A Fairbanks-Morse Red Seal stationary rig with an Ensign - carbureted Continental engine rated at 72 hp (at 2400 rpm) delivers 880 gpm at 75 lb pressure. This feeds eight 600-ft laterals, each covering 9/10ths of an acre. Simultaneous coverage through all eight, then, is 7.2 acres. By moving the rig every six hours, the unit can satisfactorily pre-irrigate 120 acres.

With sprinkler irrigation gaining steadily in popularity, Herndon is convinced this load is here to stay—and grow. In his over-all scheme of things, it is only one of several basic loads; but it is basic. His principal loads are all powertype usages and are all sizable.

Because these loads can be fed in large helpings, he maintains minimum storage—just two 3000-gal. tanks, one for butane, one for propane—and they are only for emergencies. His two bulk trucks, one a 1500-gal. single barrel, the other an 1800-gal. twin barrel, pick up at the refinery and deliver directly. At several hundred gallons per drop, they are empty before they get back to the plant, so intermediate storage is unnecessary, except in hurry-up deliveries.

An all-carburetion load is a good way to get started. The drops are big, the headaches small. The only real domestic business Herndon is going after now is househeating. Later, after he is better established, he can get the traditional domestic loads. Carburetion, however, will no doubt continue to be his No. 1 load.

Power News

Hercules Motors opens service training center

Hercules Motors Corp. has opened a new service training center at its headquarters in Canton, Ohio, and inaugurated a sixmonth series of regularly scheduled training courses for distributor and dealer personnel.

Service and parts personnel of Hercules' distributors and dealers throughout the world have been invited to participate in one or more of these sessions, E. L. Latta, director of service engineering, has announced.

The conference-type training courses will cover the basic fundamentals of design, servicing, and maintenance of all Hercules products. These include Hercules LPG engines and engines of Hall-Scott design.

R. H. Ball, V. F. Phillabaum and James Russell, Hercules sales and service engineers, will conduct the conferences, each of which will be limited to 12 men to assure "positive and personal attention."

Entire city's equipment, vehicles converted to LPG

Dyersburg, Tenn. recently converted its entire fleet of municipal vehicles and equipment to Philgas.

Some 12,650 citizens depend upon municipally owned utilities, including gas, water and electricity supplied through the Tennessee Valley Authority. The city supplies natural gas under normal circumstances, but in severe weather L. P. gas serves as a stand-by fuel.

Campbell - McLester, director of public works, hit upon an idea for utilizing off-peak season supply. He

proposed that all municipal vehicles and equipment be converted to City fathers accepted his counsel and a wholesale conversion to Philgas began. McLester contacted Howard Jones, executive vice president of Airlene Gas Co., a Phillips customer and LPG distributor in Dyersburg, for advice on how to handle the mechanics of the conversion. Airlene did the entire conversion under the direction of Jones and Flois Murphy. St. Louis Division Motor Fuel salesman Frank Bube was called and Philgas took a quick step forward.

Carburetion experts came to Dyersburg for the exacting task of converting 33 vehicles to Philgas. Trucks, pickups, dump trucks and electric power servicing equipment underwent conversion. Pole trucks, cargo trucks and an asphalt Asphalt distributor came next. pumps and heaters were rigged for L. P. gas. Then the local police cars were changed. Only the fire fighting equipment remained on gasoline . . . this was done because of infrequent use. Dyersburg suddenly became a "Philgas City" at a cost of only \$10,500 for conver-

To re-fuel the fleet, a special rolling truck was devised whereby it



Teaching the teachers was the job facing LPG dealer Harvey Gigstad (Bettergas Co., Prophetstown, Ill.) and Illinois LPGA Executive Secretary Donald L. Nickel when this photo was taken in early March. They were among a dozen LPG men who helped nine Illinois vocational school instructors "bone up" so they could teach one-night-a-week, eight-week courses in nine Illinois towns.





The Central Kentucky Gas Co., Stanford, Ky., has its complete truck fleet operating on propane. This new International is the latest addition to the company's fleet. The company is operated by I. E. Patterson.

could be filled at the city supply and moved to maintenance headquarters. There, trucks, cars and equipment find easy access to their fuel requirements.

Fuel costs have been cut as much as 5 cents per gal. and oil consumption was cut to the minimum. Spark plugs enjoy longer life; maintenance costs are drastically reduced.

Courtesy "Selling 66" March-April 1959 of: the Kentucky LPGA, State Department of Education, State Fire Marshal's Office, LaFayette (Ky.) Vocational School, and the Auto & Aero Supply Co., Inc.

It was agreed that such a course was in demand: (a) to up-grade mechanics presently engaged in this work and (b) to prepare students by classroom and practical shop training to properly install and service L. P. gas units as they pertain to internal combustion engines.

Auto & Aero's participation in the project will be the training of 14 instructors to handle the classes at the student level. The training will be given at Auto & Aero's classroom in Cincinnati, Ohio, on the tentative dates of May 14, 15.

The course will follow the general outline of Auto & Aero's present LPG school, eliminating, for the most part, those sections pertaining to basic engine operations, since the instructors attending are well versed in engine tune-ups.

It was suggested that BUTANE-PROPANE News' Power Manual be used as the instructor's text book. In addition, manufacturers of LPG carburetors will be invited to furnish service manuals on their particular product.

It was also suggested that a representative of the State Fire Marshal's Office conduct the section of the instructor's course pertaining to the safe handling of L. P. gas, since Kentucky regulations are not in all cases the same as in other states.

It is anticipated that these courses will be able to start in the area vocational schools by September.

Farm market showing increase in carburetion

According to Century News the farm market is probably showing the greatest increase in the LPG carburetion field.

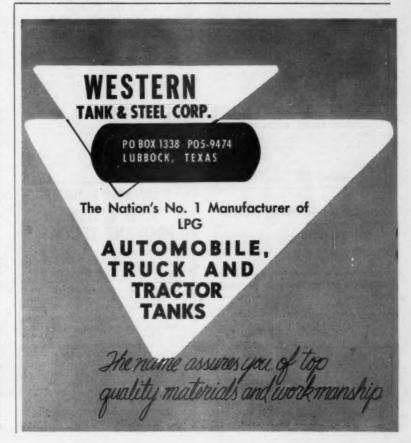
Factory equipped L. P. gas tractors are slated for an increase in production and this should boost the prospects for conversions. With the decrease in production on most automotive and farm products during 1958, LPG tractors still held their own, with only a 3½ per cent reduction over the previous year, as compared to much higher percentage losses for diesel and gasoline tractors.

Here's how tractor production fared during 1958:

LPG carburetion course anticipated in September

A conference was held recently to discuss a course in the use of L. P. gas as an engine fuel. The course will be held in all 14 area vocational schools in Kentucky.

Those in attendance at the conference included representatives



CLASSIFIED Advertising

All Classified Advertising payable with order. Copy must reach publisher's office prior to the 1st of the month preceding publication. Address: Classified Advertising Materials, BUTANE-PROPANE News, 198 S. Alvarado Street, Los Angeles 57, Calif.

DISPLAY CLASSIFIED

\$12.00 a column inch per issue. Choice of 18, 14, 12, 10 pt. display type for headings. Set with 1 pt. border. Maximum ad size 3". No cuts permitted. Publisher will set ad for maximum effect in space purchased.

UNDISPLAYED CLASSIFIED 15# a word. Set in 6 pt. type without border. \$3.00 minimum charge per insertion. If Blind Box number care of B-P News is used, count as five words.

POSITION WANTED. Undisplayed rate is one half of above rate, payable in advance.

DISCOUNT OF 10% if full payment is made in advance for four consecutive insertions of undisplayed eds.

SITUATIONS WANTED

MY 24 YEARS' EXPERIENCE IN ALL phases LP Gas, operations management, plant construction, fleet delivery, bottles, bulk Propane Air Plants and Utility operations, available June 1st. Reply Box 32, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

HELP WANTED

LPG RETAIL BRANCH MANAGERS WANTED by progressive chain of LPG and appliance sales outlets on West Coast. Men chosen must have proven sales, collection and technical background. Good salary with fringe benefits. Write Box 24, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

UNUSUAL OPPORTUNITY for an energetic married man for sales and service work with LP-Gas dealership, Cape Cod area. Some mechanical aptitude reguired. Massachusetts oil burner certificate desired. Right man can look forward to becoming manager. Salary plus commission. Reply giving full qualifications to Box 33, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

WANTED: EXPERIENCED LP GAS service and delivery men to train for plant management in Southeastern Wisconsin. Give age, experience, references, desired starting pay with employment record last 10 years. Reply Box 28, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

FIRST CLASS LP-GAS RETAIL MANAGER

for Tenas bulk operation. Must have proven record of ability in sales, service, supervision and business of ability in sales, service, because it is a supervision of qualifications. Send completes unproduced the consideration of the conside

Reply Box 31, BUTANE-PROPANE News 196 Se. Alvarado St., Les Angeles 57, Calif.

BUSINESS OPPORTUNITIES WANTED

WANTED TO BUY: SMALL LP GAS business in Florida. Reply Box 30, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

BUSINESS OPPORTUNITIES OFFERED

LPG BULK PLANTS. WE SPECIALIZE in selling petroleum properties throughout Midwest. Have number desirable plants for sale. OLE BRODD, PETROLEUM MARKETERS, 605 Produce Bank Bldg., Minneapolis, Minnesota.

FOR SALE BUTANE PROPANE BUSINESS

Profit \$20,000 to \$25,000 Annually, with hired manager and 2 employees. 22,000 gallon storage plant, bottling shad, etc., on S. P. siding, surfaced and fenced. Two combination bottle and bulk delivery trucks. One flat bottle truck and one service pickup, 90% of sales in bottles. Winter-Summer ratio 2 to 1, ideal year round climate. Terms available. Principals only.

Resty Bex 33, BUTANE-PROPANE News 198 Se. Alvarado St., Les Angeles 57, Calif.

BUSINESS OPP. OFF .- Contd.

LP GAS BUSINESS FOR SALE in southern Missouri; over 600 customers; two trucks, 36,000 gallon storage; a real moneymaker, \$40,000 will sell for \$20,000 down. Reply Box 25, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

FOR SALE - TRUCKS - TRAILERS

USED PROPANE DELIVERY TRUCKS, 1200 GALLONS W.C. Presently in use and being replaced with larger units. United Petroleum Gas Co., 4820 Excelsior Blvd., Minneapolis 16, Minnesota.

USED PROPANE DELIVERY TRUCKS. 1191 W.G. 1953 Ford F 600 . . 1656 W.G. 1955 Ford F700 . . Presently in use. Contact Service Gas Inc., P. O. Box 189, Morris,

HAUL MORE PROPANE AND LESS STEEL! LOAD AND UNLOAD FASTER! Save the annual Federal tax on trucks that weigh more than 13,000 lbs! Users praise the Nor-Tex 2500 WG Single Barrel Payload Special of 202B X-rayed material and stress relieved. Weighs only 12,890 lbs. completely equipped with High Flow Plumbing, Meter. Hose, Hose Reel, Fire Extinguisher and mounted on cab-forward truck with 108" cab to axle dimension. Increased capacity pump boosts deliveries to 50 GPM. Vapor manifold permits easy simultaneous loading and unloading of twin tanks with either compressor or liquid pump. These popular, carefully engineered and sleek designed Nor-Tex Single and Twin units are produced in four attractive models: The "Standard"—the "Custom"—the payload "Special" and the "DeLuxe." That's not all! Twin units, up to 2000 WG, are mounted on 85" cab to axle. Start hauling more gas and less steel. De it profitably and in much less time. Phone, wire or write for prices now. NORTH TEXAS TANK CO., Denton, Texas. Phone DUpont 2-5416.

TRADE WITH A TRADER! **NEW & USED** PROPANE TRUCKS

I'll trade with you on the phone! My ONE MAN SALES FORCE (mymy ONE MAN SALES FORCE (myself) SAVES you the usual 10% sales commission, eliminates any mix-up on order, delivery date, financing, etc., yet this year, as in every year for past 10 years, I SELL MORE tank past 10 years, 1 SELL MORE tank trucks than anyone else. If you have a trade-in, send me photo and descrip-tion. Used and NEW units (1400-2200 WG) in stock for delivery NOW. EASY TERMS—(10% Down—36 Mos. on balance—I carry my own paper). DON'T BUY OR LEASE a unit until you CALL ME—Day or night. WHO AM I?

Preston Grace—Ph. 570 WHITE RIVER DISTRIBUTORS Batesville, Arkansas

FOR SALE-TRUCKS - TRAILERS - Cont.

TRANSPORT. 5600 W.C. GALLONS. 250 lb. twin barrel 1953 Trinity. Like new paint, tires, and tandem. Excellent transportation and/or portable storage! Beverly 8-5235. Bob Ross Inc., 10918 South Western Ave., Chicago 43, Ill.

NEED A NEW OR USED PROPANE BULK TRUCK?

Why don't you call a man who KNOWS trucks, likes to TRADE, makes quick delivery, has EASY TREMMS, appreciates your business, and SAVES YOU MONEY. All sizes in stock. Hundreds of SATISFIED CUSTOMERS the World Over.

WHITE RIVER DISTRIBUTORS

DELIVERY UNITS: SINGLE OR Twin Barrel. Our prices are competitive. We invite comparison between the equipment and price on our units with any competitive units. We believe we can give you the highest pavloads per pound of gross vehicle weight. Write, wire, or phone. Lubbock Machine & Supply Co., Inc. Drawer 1589, Lubbock, Texas.

TRINITY BULK TRUCK UNITS

In stock, ready for immediate delivery. Buy early and avoid steel price increases.

Write, wire or phone RAY REEDY
TRINITY STEEL CO.
Dollas, Texas
Phone: FL-7-3961

WE SAVE YOU MONEY LOOK at this typical SPECIAL

BRAND NEW 1959 Chev. 2 ton with 1800 gal. twin propose tanks, PIPED COMPLETE with Viking pump, Neptune Printer Meter, 20# fire ext., 75' each filler & vapor hoses, ICC lights, full size rear cabinet & controls, READY TO USE-

\$636.00 Down and 36 payments of \$181.45 including interest.

You SAVE over \$1,000.00 by buying instead of leasing. Other sizes (1400-2200 WG) & other makes new trucks (at FLEET PRICES) available. WE TRADE. We have USED TRUCKS & TANKS also. Call me anytime.

Preston Grace

WHITE RIVER DISTRIBUTORS Ph. 570—Batesville, Ark.

CLASSIFIED Advertising



FOR SALE-TRUCKS - TRAILERS - Cont.

TRANSPORTS: SINGLE OR TWIN barrel; new or used; for lease, or sale on budget or rental sale plan. If you want maximum payload, with all of the latest equipment engineered to fit your truck, roads, and your hauling problem, get the LMC PAYLOADER

Contact Lubbock Machine & Supply Co., Inc., Drawer 1589, Lubbock, Texas

FOR SALE-TANKS - CYLINDERS

USED 100# PROPANE GAS CYLINDERS and pressure regulating equipment. Reply Box 34, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

FOR SALE: USED 100 lb. CYLINDERS up to 500 available. Write, wire or phone. Con-sumers Petroleum, 808 Post Road, Fairfield, Connecticut. CLearwater 9-5291.

FOR IMMEDIATE SALE: 1—30,000 gal. U69 Propane tank, manufactured February, 1953. Perfect condition, fully equipped. Reply Box 36, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

SKID TANKS

- IN STOCK NOW -

3000 gallon size built especially rugged for oil field use. Write, wire or phone

Labbock Machine & Supply Co., Inc. P. O. Drawer 1589 Lubbock, Texas

PROPANE GAS SYSTEMS

"Listed by Underwriters' Laboratories, Inc." If you use as many as one load of tanks per year, it will pay you to contact us. Distribution throughout the Mid-West and Southern states.

LOWRY TIMS COMPANY

Quality Steel Products Division. Cleveland. Miss.

STORAGE TANKS

Immediate Delivery

250.8 WP Propane Storage Tanks, 8,250 WG
through 12,450 WG; 272 diameter; 10,170 WG
through 2,500 WG, 85" diameter; 10,260 WG
mediate delivery, our truck feet. ORDER EARLY
and AVOID STEEL INCREASE.
Write, wire or phone RAY REEDY
TRINITY STEEL CO.
DALLAR, TEXAS
Phone; FL-7-3961.

FOR SALE-MISCELLANEOUS

FOR SALE—IMMEDIATE DELIVERY!
Eureka Smokehouse Burner Assemblies! For meat smoke houses using bottled gas. Completely automatic. Clean filtered smoke. Distributes heat uniformly. Low gas consumption. Automatic temperature and pilot control. Less product shrinkage. Easily installed. Write for descriptive pamphlet. Eureka Equipment Company, P.O. Box 396, Beloit, Wisconsin.

DECALS MADE FOR TRUCKS, EQUIP-MENT. Small or large quantities. Catalog free. Mathews Co., 827 S. Harvey, Oak Park, Ill.

SERVEL GAS REFRIGERATORS

Some with top freezers Send for Prices

FRED A. BROWN COMPANY 170 W. Cumberland St., Philadelphia 33, Pa. REgent 9-1130 Est'd 1918

FOR SALE-MISC .- Cont.

— 20% EQUIPMENT SALE Carburetion, Lift Truck Cylinders. E. H. Steel and brass fittings to 4", etc. For list, write Box 27, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

DIXIE SEMI-LOCK HOODS, ALUMINUM and Aluminum coated steel. Wall bracket or free standing. GUARANTEED mechanically for life. \$3.00 up. Dixie Manufacturing Company, Elizabethiown, Kentucky, Box 65. Phone Collect RO-5-9229.

FOR SALE AT DISCOUNT: 20 lb. used, galvanized, propane cylinders in 3 models: 1. with permanent valve protection cap and 3." handwheel valve for use on trailers; 2. with standard valve protection cap and 3." handwheel valve; 3. standard Cash & Carry cylinder with valve for 3." connectors on Cash & Carry regulators. Inquire for details and prices, City Gas Service Inc., Wisconsin Rapids, Wisconsin Rapids,

SERVEL GAS REFRIGERATORS

\$400A-4 cu. ft. BN600A-6 cu. ft. S600A-with Cross-top Freezer

Used: Guaranteed in good operating order. Excellent condition. Low delivery cost anywhere. Send for illustrated folder NOW.

BEACH REFRIGERATOR CO.

196-11 Northern Blvd. Flushing SB, N. Y. Phone FLushing 7-6161

WANTED-MISCELLANEOUS

WANTED TO BUY: NEW OR USED propane delivery tank or semi-trailer, 3000-6000 W.C. Write to Box-347-P.O.—Fond du Lac, Wisconsin.

PROPANE 100# CAPACITY CYLINDERS. Trailer and carloads. Indicate details, quantity, price, location. Reply Box 29, BUTANE-RPO-PANE News, 198 So. Alvarado St., Los An-geles 57, Calif.

WANTED IMMEDIATELY: 1800 WATER gallon or larger delivery truck. Give full particulars and prices. Joseph F. Boente Sons Propane Co., Carlinville, Illinois.

WANTED—30,000 GALLON USED tanks; will consider 18,000 gallon also. Reply to Mid-west Bottle Gas Co., 119 North 3rd Street, LaCrosse, Wisconsin.

FOR RENT or LEASE

6,000 to 18,000 GALLON PROPANE STOR-AGES for rent or lease. Reply Super Petroleum Corp., Box 776, Tulsa, Oklahoma.

PROFESSIONAL SERVICES

INDIVIDUALLY DESIGNED Ammonia and LP Gas Plants

H. Emerson Thomas & Assoc., Inc. Westfield, N. J.

PROFESSIONAL SERV .- Cont'd

LEI MX 30 YEARS OF PRACTICAL "LP" experience assure you maximum profits. Equipment revisions, property evaluations for sales or refinancing, and assistance on legal suits also supplied. Floyd F. Campbell, Management Counselor, 821 Crofton Ave., Webster Groves, Mo. LET MY 30 YEARS OF PRACTICAL "LP"

PROPANE GAS PLANTS

ANHYDROUS AMMONIA PLANTS

Designed and Installed

PEACOCK CORPORATION

Box 268, Westfield, N. J.

L. P. GAS INSURANCE

Have your agent write us about our Complete and Comprehensive Coverage for Adequate Limits of Liability at Reasonable and Normal Rates with Specialized Safety Engineering and Claim Service. Available only in Alabama, Arkansas, Arisona, Florida, Georgia, Kansas, Louisiana, Mississippi, New Mexico, Okiahoma and Texas.

PAN AMERICAN FIRE & CASUALTY COMPANY

Earl W. Gammage, President P. O. Box 1662

Houston, Texas

EASY WAY TO SELL AN EXTRA LP GAS APPLIANCE EVERY DAY WITH THIS CLASSIFIED AD PROGRAM

Here's a 'Gold Mine'' for YOU in classified advertising. Prepared by an LP Gas atvertising specialist. Easy to follow...

10 wasted words... just cold, hard facts—all pre-tested to pay off in sales for you. A complete report on how to make LP Gas classified advertising work selining extra appliances for your extra profit. Packed with examples you can use. Written for the busy LP Gas executive to make an advertising specialist out of his secretary or office manager. Money back guarantee of complete satisfaction. First of a series of reports based on 12 years of experience specialising in LP Gas advertising.

SPECIAL INTRODUCTORY OFFER

Gas advertisins.

SPECIAL INTRODUCTORY OFFER
ANCE YOU 53.00
Off Regular \$10.00 Special Report Price.
(Orders must be gostmarked no later than
June 39, 1959, with check or mosey order
to qualify for this 50% discount.) RUSH YOUR ORDER TODAY! \$5.00 PER COPY, POSTPAID

LP Gas Adv. Dept.
Robt. Podesta & Associates
Suite 212, Security Bidg., San Jose, Calif.

BUSINESS RECORDS

BUSINESS RECORD FORMS. ALL-WEATHER EZE-SNAP delivery invoices, for use when making LP gas metered truck de-liveries. 1000 sets (3 part) imprinted with name, address and telephone. \$18.00 per 1000 sets. Advise make of meter. DEGREE DAY SYS-TEMS, Dept. BP WOODSIDE 77, L. I., N. Y.

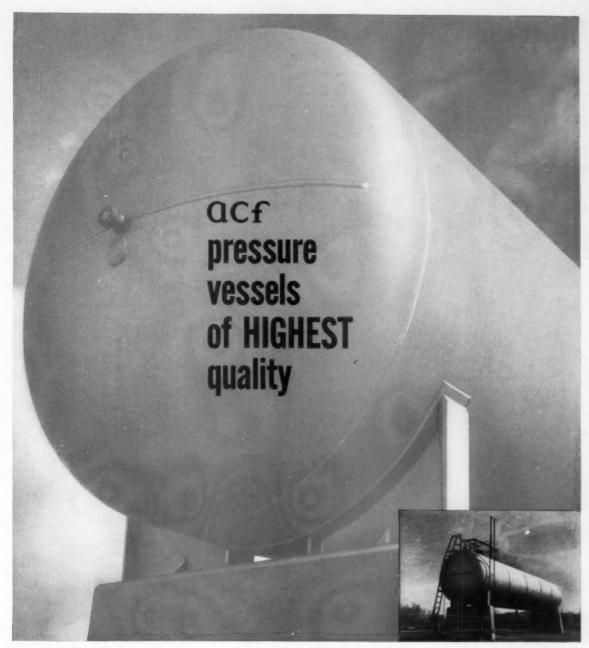
SERVING 20,000 PETROLEUM COMPA-NIES over 30 years with SERVING 20,000 PETROLEUM COMPA-NIES over 30 years with petroleum price cards, customer reminder Eze-Stik labels, tel-phone call—service order—L/P metered deliv-ery invoices, Eze-Soap Service Form, Duralu-minum ticket holders, Sort-O-Matic Rack, ex-Write us for details, no obligation. DEGREE DAY SYSTEMS, Dept. BP., WOODSIDE 77, NEW YORK.

Advertisers

*These advertisers carry additional information on their products in the 1959 Butane-Propane Catalog.

This advertisers' index is published as a convenience and not as part of the advertising contract. Every care will be taken to index correctly. No allowance will be made for errors or failure to insert.

*ACF Industries, Inc.	Third Cover	Grayson Controls Div.		Quad, Inc.	-
*Aluminum & Brass Co.	-	Robertshaw-Fulton Controls Co.	-	Queen Prods. Div., King-Seeley Corp.	62
American Liquid Gas Corp.	-	Griffiths, E. F., Co.	-		
*American Meter Co., Inc.	91	Annual Control			
Anchor Petroleum Co.	35	Hannay & Sons, Inc., Clifford B.	93		94
Anco Mfg. & Supply Co.	-	*Hansen Mfg. Co.	7.0	Radiator Specialty Co.	67
Anderson & Forrester	-	Hardwick Stove Co.	_	Raypak, Inc.	
Arkia Air Conditioning Corp.	61	Harper-Wyman Co.	_	Reznor Mfg. Co.	55
Armstrong Products Co.	67			Richardson Gasoline Co., Sid	29
Arps Corporation	-	Home Gas Equip. Co.	15	Ridge Tool Co.	7
		*Hones, Chas. A., Inc.	44	Robertshaw-Fulton Controls Co. Grayson Controls Div.	
		Hydro-Therm, Inc.	64	Rochester Gauges, Inc.	
Baso, Inc.	-				
*Bastian-Blessing Co., Inc.	22	Illinois Iron & Bolt Co.	_	*Rockwell Mfg. Co. Gas Products Div. Fourth	Cover
Beacon Petroleum Co.	-	Timos Tron & Son Co.		Roney, Inc.	_
Beaird Co., Inc., The J. B.	-			Rolley, Inc.	
Beam Products Mfg. Co.	-	J & S Carburetor Co.	-		
*Bendix Aviation Corp.		Johnson Degree Day Systems	_		
Zenith Carburetor Div.	-	*Johnson Gas Appliance Co.	-	Samuel Stamping & Enameling Co.	-
Betts Machine Co.	-	Johnson Machine Shop	-	Selwyn-Pacific Co.	-
Blackmer Pump Co.	90			Sheffield Bronze Paint Corp.	-
Blue, John, Co.	92			Shell Oil Company	-
Brake Manufacturers, Inc.	-	King-Seeley Corp., Queen Prods. Div.	62	Siegler Corp.	etenn
Brown Stove Works	-			*Sinclair Oil & Gas Co.	6
Brunner Div., Dunham-Bush Co., In	nc. —	Lamplighter Gas Lights	_	*Smith Precision Products Co.	89
		*Linde Co., Div. of Union Carbide Corp.	. 81	Spatz Paint Industries, Inc.	94
				*Sprague Meter Co.	_
*Century Gas Equipment Marvei-Schebler Prods. Div.			51, 63	Squibb-Taylor, Inc.	-
	Man International	Locke Stove Co.	49	Stampings, Inc.	_
Chattanooga Royal Co.		LPG Leasing Corp.	36	Stewart-Warner Corp.	_
*Cities Service OII Co.	77	Lubbock Machine & Supply Co.	75	Suburban Appliance Corp.	65
Coleman Co.	-			Topolitain Topolitaines Corp.	
Columbian Steel Tank Co.	_	Madden Brass Prods. Co.			
Corken's Inc.	72		-		
Cost Calculator	15	*Magic Chef Div. Dixie Products	-	Temco, Inc.	45
Cribben & Sexton Co.	-	Manchester Tank & Equip. Co.	-	Texaco, Inc.	73
		*Marvel-Schebler Prods. Div., Century Go Equip.	as _	*Texas Natural Gasoline Corp.	
Davis Engineering Corp.	_	Master Tank & Welding Co.	79	Trinity Steel Co., Inc.	33
Day & Night Mfg. Co.	38	Minneapolis-Honeywell Regulator Co.	"	Tuloma Gas Products Co. Front	Cover
Dearborn Stove Co.	57	Appliance Controls Div.	-		
Delta Tank Mfg. Co.	3,	Water Heater Controls Div. 17, 18,	19, 20		
Dixon Valve & Coupling Co.		Mississippi Tank Co.	83		
Drake & Townsend, Inc.		Motorola Comm. & Electronics, Inc.	1	*Union Carbide Corp., Linde Co., Div.	81
	_			Vega Industries, Inc.	-
Dunham-Bush Co., Inc., Brunner Di	v. –			*Viking Pump Co.	87
		*Neptune Meter Co.	-		
Elgin Softener Corp.	-	Norco, Inc.	8		
Ellis, Geo. D., & Sons		*North Texas Tank Co.	4, 5	Waldorf Heater Co.	_
Ellis Manifold Co.	_			Wallace, William, Co.	
*Ensign Carburetor Co.	_			Metalbestos Div.	_
		Ohio Foundry & Mfg. Co.	66	*Warren Petroleum Corp.	10
				Weatherhead Co., The	_
Fine Products Co.		The second secon		Western Tank & Steel Corp.	99
Firestone Tire & Rubber Co.	13	Parkhill-Wade	98	Whitehead Mfg. Corp., D. W.	-
*Fisher Governor Co.	2	*Pasley Mfg. & Dist. Co.	14	White-Rodgers Co.	_
Fisk Trailer Sales Co.	_	Peerless Mfg. Div. of Dover Corp.	-	Wood Mfg. Co., John	53
Ford Motor Co.	26, 27	Phillips & Buttorff Corp.	91		33
		Phillips Petroleum Co.	-		
	1 3	Powell Co., Wm.	-		
Gas Equipment Mfrs. Assoc.	-	*Pressed Steel Tank Co. Second	Cover	*Zenith Carburetor Div.	
General Processing Corp.	87				



GUARANTEED QUALITY because, in addition to our own rigid inspection, all tanks are National Board approved and are inspected and certified by Hartford Steam Boiler Inspection and Insurance Company.

STEEL-GRIT-BLASTING removes all mill scale before prime coat of paint, provides a superior bonding surface that assures lower maintenance cost throughout the life of the tank. Steel-grit-blasting inside assures perfectly clean, trouble-free installations.

STANDARD SIZES from 2,400 to 74,000 gallons and more, entirely fabricated at **QCf**, assures prompt delivery and economy, easy specifying for your needs. Optional features include integral steel saddles, Uniformed one-piece flued manway.

Write for the free four-page bulletin, "ACF Storage Tanks", or ask any American Car and Foundry Sales Office for a copy.

AMERICAN CAR AND FOUNDRY
DIVISION OF ACF INDUSTRIES, INCORPORATED
750 THIRD AVENUE, NEW YORK 17, N.Y.

Storage Tanks for propane, chlorine, refrigerant gases — Propane Transports — Chemical Transports — Safety Valves

are inefficiencies nibbling away at your profits?



With vapor meters you can schedule your truck routing to deliver the most gallons per miles covered. Fills are made at your convenience and on a planned basis. Expensive call backs and emergency deliveries are eliminated.

Also metering will help you to clean out office red tape by putting your billings on a systematic, pay-as-you-use basis.

Learn all the facts about the profitable advantages in vapor metering. Write for bulletin ADV-41, Rockwell Manufacturing Company, Pittsburgh 8, Pa.



Go Modern With These Modern Meters

These are the vapor meters you need. Made with sturdy, rust-proof, impact resistant aluminum outer case. Easy to install on brackets. And they can be repaired quickly and economically. Small in size but have a big capacity-up to 240,000 btu's per hour.



LP-GAS VAPOR METERS

another fine product by

